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ENGLISH IN THE GERMAN REFORM SCHOOL

THE teacher of modern languages has, according to the regulations and schemes issued by the government, to solve the following problems: first, to teach the pupils to acquire a good pronunciation; second, to read fluently and according to the meaning of the sentence; third, to translate correctly from the foreign language into his own, and *vice versa;* fourth, to converse with the teacher and his classmates in the foreign idiom on subjects of everyday life, on reading matter, and vocabularies; fifth, to acquire a considerable stock of foreign words, which he must be able to use on any occasion; sixth, to study the rules of grammar, of style, of etymology, and of the metrical system of the foreign language; seventh, to get a thorough knowledge of the historical development of the foreign language and of the customs and usages of the country; eighth, to read a great many and a great variety of the works of literature of modern times and of the classical period; ninth, to learn by heart and to recite poems and dramatic selections of special beauty; tenth, to write essays on easy subjects taken from nature or from reading.

This is doubtless a rather elaborate bill of fare, and many a teacher has suffered from mental indigestion by such a surfeit while endeavoring to make his pupils model philologists. It is an almost herculean task, especially in great towns, where there are forty or fifty boys or girls in one form (that is, grade).

Indeed, the more gigantic the form the fewer are the lessons that can be devoted to the teaching of modern languages. And this number of lessons, I am sorry to say, is rather limited, generally not exceeding four a week in schools where the language begins in the lower third, and in the upper classes being restricted to even three. Happy the master who teaches classics with the eight to ten lessons a week allotted to his instruction. For, though the difficulties in grammar and reading are doubtless greater than in the modern languages, yet he is not obliged to *speak* Latin or Greek to his pupils, and so he loses no time in teaching the mysteries of pronunciation, and he has not to treat of the development of these languages, for they are dead and their career is ended. A great part of the lessons is absorbed by the writing of extempore exercises, which have to be handed back with the various mistakes duly corrected. How little time then remains, with four or three lessons a week, to perform the task prescribed by the government!

It was in fact this want of time that led to a reform movement in a great many schools in Germany. At first the government showed very great hesitation, being even suspicious of the movement, and only reluctantly gave its consent to altering the method of teaching and the arrangement of the different branches of instruction; but there are now in all about forty schools which have obtained permission to try the new method. As to this arrangement of the different languages and sciences, both the gymnasium and the so-called realgymnasium begin with French and German in the lower sixth form as the chief subject of instruction, there being besides lessons in general history, natural history, geography, and mathematics (reckoning). This state of things lasts three years, through the sixth, fifth, and fourth forms. In the lower third Latin lessons begin, naturally history is omitted, and the number of French and German lessons is somewhat curtailed so as to give sufficient scope to the new language that is now taught, and which henceforth is the center of the whole teaching. This lasts two years (in the lower and upper third), but thereafter the two schools widely differ from each other, the gymnasium beginning Greek

in the lower second, whereas the realgymnasium teaches English in its stead. This new language therefore begins two years later than in the common realgymnasium (the non-reformed schools), but six lessons a week are allotted to it, whereas in the non-reformed schools only three lessons are devoted to this subject. The total number of lessons is eighteen in both kinds of schools, that is, three lessons a week from the lower third to the the upper first in the common schools, six in the lower and upper second, and three in the lower and upper first in the reform schools.

The new method of teaching English has had such remarkable success that the pupils at the end of the last term in the lower second know quite as much of the language as the boys who have been taught it for three years. How has this been brought about?

First of all by a thorough course of phonetic instruction. For the first three months the scholars read texts only in transcriptions, that is, not in the real orthography of the words, but in transcriptions which exactly denote the sounds of the words as they are read; how the words are spelled is taught afterwards. There is no room in this short essay to show all the advantages and disadvantages of this system, above all the great difficulty, when spelling is begun, of apprehending the two different pictures which nearly every English word offers, one for the ear—the sound—and the other for the eyes—the spelling. Suffice it to say that the adherents of the new method assert that it is far more conducive to the acquirement of a good pronunciation and correct orthography than the old one is. It is obvious, of course, that the phonetic training includes also the correct pronunciation of the consonants, the voice as well as the voiceless, so that exercises in pronouncing *big*, *jug*, *bog*, *pug*, *bid*, *bit*, *pit*, *bed*, *bet*, *pet*, *bad*, *bat*, *pad*, *pat*, are a kind of daily bread; for a great many districts in our beloved country utterly neglect these distinctions, which are absolutely necessary for understanding the language or being understood.

The first thing, therefore, that the pupil hears is the living word from the mouth of the teacher, no dead characters in

printed books—a new departure which has done wonders in making the lessons lively and interesting, for the children are eager to imitate, the younger it is true more than the older, but even in the lower second at fifteen or sixteen a certain reluctance and repugnance to repeat simultaneously what the master says may gradually be overcome, though I confess that this is the disadvantage of beginning English so late. Hearing, speaking, reading, writing are the various progressive features of the system. In order to make the lesson interesting, speaking occupies a predominant position. The teacher first puts different questions to find out the subjects, the verbs, the objects, and the adverbs or adverbials. After having uttered the sentence, "Mr. James, the English master, enters the room," the teacher requires the class to answer the following questions: "Who enters the room?" "Who is Mr. James?" "What does Mr. James do?" What does he enter?" Or I write down the word "sponge" and "brush" on the blackboard. "Who writes on the blackboard?" "What do I write on the blackboard?" "What do I do?" "Where do I write the words?"

Then the class must soon become accustomed to being addressed in English. Short orders must be given them, the meaning of which must at first be explained by signs, *e. g.*, "Sit down," "Stand up," "Open the book," "Shut the book," "Open the windows," "Shut the windows," "Come to the blackboard," "Take the chalk," "Write on the blackboard," "Take the sponge," "Rub out what you have written," etc. A little afterwards have the boys express their actions in words, saying "I am sitting down," "I am going to the blackboard," "I am taking the chalk," or another pupil says in the third person, "He is rubbing out what he has written down on the blackboard," or I say, "We are sitting down," "We are standing up."

As the number of words which are learned by heart, or which have been learned during the lesson, increases, the circle of the conversations enlarges, and everything that is done in the class is expressed in words. So when the master enters the room the boys say, "You are entering the room;" "You are stepping on the platform;" "You are pushing back your chair;" "You are

sitting down;" "You are opening the ink-stand;" "You are taking the pen;" "You are dipping it into the inkstand;" "You are opening the class-book;" "You are turning over the leaves;" "You are writing your name;" "You are putting down the pen;" "You are shutting the class-book;" "You are putting it aside;" "You are standing up;" "You are getting down from the platform;" "You are coming up to the class," etc.

The next step to be taken is to teach the class to put the questions themselves, *e. g.*, "What hats have we today?" "When is your birthday?" "How old are you then?" "In what year were you born?" "In what year did three emperors reign in Germany?" "Who were these three emperors?" etc.; or to give orders to a class-mate who executes them, expressing at the same time in words what he is doing.

A. Open your English reader.
B. I open my English reader.
A. Read from the top of page sixteen to line five.
B. I am going to read from the top of page sixteen to line five.
A. Shut your book and tell me what you have read.
B. I am going to shut my book and tell you what I have read.
A. Count the verbs which occur in those lines.
B. There are six verbs in those lines.
A. Which of them are strong verbs and which are weak ones.
B. To see; to give; to sink; to swim; are strong verbs. To place; to hand; to try; are weak ones. Etc., etc.

Grammatical exercises may be easily added to these conversations. After having learned some propositions, the teachers make the pupils form clauses and sentences in which prepositions are used, *e. g.*, "I am sitting *between* C and G." "B is sitting *before* me." "F is sitting *behind* me." "C and G are sitting *beside* me." "My seat is *near* the door." "R is sitting *under* the lamp." "The lamp is *over* me." "R, the master, is coming *into* the room." "C is looking out *of* the window." "I am going *to* my seat," etc.

Excellent subjects for conversation are afforded by pictures[1] representing the four seasons, a town, a village, a map of London, of Great Britain, etc., and narratives in the reading books. By

[1] The best of them published by Hölzel, Vienna.

these pictures and narratives fluent and coherent speaking is acquired. The continual obligation to reproduce what he has heard, read, or seen, in coherent speech, compels the pupil to concentrate his attention far more than would otherwise be the case; while to ascertain what is most important and what is of less value is an excellent means of sharpening the mind. The last and highest stage to be taken in the first year of teaching English is to tell the pupils a story in German and to ask them to reproduce it in English. If this result be obtained, the success of the first year — the speaking year — must certainly be regarded as most satisfactory, and that it is obtained at the reform schools has been proved by M. Walter, headmaster of the Model Reform School at Frankfort on the Main, at whose request two of his colleagues wrote down the accompanying uncorrected conversations, which from beginning to end were carried on by the pupils alone, upon various subjects that had been treated of in the course of the first year. They are as follows:

I

DIALOGUE ON THE PICTURE "SPRING" BY HÖLZEL[1]

Good day, Sir. — Good day, Sir. Are you coming from the mountains? — Yes, Sir. I made a long excursion along the mountains and valleys. It made a beautiful impression on me to regard your village from the top of the mountains. — The inhabitants of our village are very good people who love me very much. You are tired. I invite you to my dinner. — Thank you. Sir; but before dinner, will you be so kind as to show me the castle which is situated on this hill? — Of course, Sir, if it is of any interest for you. John, bring me my hat! Now, we shall start off. You see here the castle of my ancestors. They lived there from the sixteenth century. One of them was a great man and in great favour at court. I am about to rebuild it. — Oh, it's a very good idea. It will be very beautiful, Now let us look at the different rooms of the castle. — Here is the chapel. My ancestors always had a pastor of their own. In the morning the bells were ringing, and how beautiful it was, when the high mountains repeated the echoes of the sounds! — I will start again. — I should be very pleased to see you very long with me. — Next time, I shall have more time to stay with you. Good bye, Sir.

[1] *Cf.* English nach dem Frankfurter Reformplan von Walter, Direktor der Frankfurter Musterschule.

II

A WALK THROUGH FRANKFORT

Good morning, my dear friend. How do you do? I'm glad to have met you. I think, we have time to take a walk through our town. — Have you seen our parks? — the "Palmengarten" and the Zoological Gardens? We will go there and see the flowers and the animals. In the "Palmengarten" we can see many new flowers, we can also go in the Palmhouse and sit down for some minutes. — I have read before some time that in the "Palmengarten" football matches take place. — Yes, a week ago the football club from Hamburg came here to play against our club. After some minutes our club had made some goals, and the club of H. was beaten. — Have you seen people playing? — Of course, I play there myself. — With whom do you play there? — With my father or with my brother. — I think, we shall go through the town now. — Well. — We are here on the Opera place, and there is the monument of William the First, our great emperor. — What is this house here? — It's the opera house, one of the most beautiful buildings in Germany. Our emperor was also there and saw some pieces. — I think, we shall go farther now. — We shall take the tram and go to the Zeil, the largest street of Fr. We see here a great many people walking along. — What wonderful impression makes this building, the post-office! — It was built some years ago, and in the interior there is a monument of our emperor too. — Let us go on. What is this park there? — It's the Zoölogical Gardens. Before the garden is a promenade, and here you see a monument. Let us go into the gardens.

III

THE SPANISH-AMERICAN WAR

Good morning, my dear friend. I was ill for a long time; but I read in the newspapers that a war is going on between the Spaniards and the Americans. I read that a battle took place at Manila. — Yes, the town has been destroyed. — Where is the place that the battle took place? — I don't exactly know. I read that a whole village has been destroyed. — Which nation succeeded? — The Americans won the battle, but the Spaniards say that only one house has been destroyed. — I see one can't say, how things are. — No, Sir; but it is true that the Americans have joined the cable from Spain with one of their ships. — Do you think that the Americans or the Spaniards will win the war? — I think the Americans. — Why do you think so? — I think so, because the Americans have money, and the Spaniards are poor. — Yes, if one will fight, one wants very much money.

IV

QUEEN VICTORIA

(Abgefragt durch die Schüler)

When was the Queen of England born? She was born in 1819. — Where was she born? She was born in Kensington Palace. — Where is Kensington

Palace? In Kensington Gardens. — What are Kensington Gardens? A part of the Hyde Park. — When did she begin to reign? In 1837. — How old was she when she began to reign? 18 years old. — Who was her husband? Albert the Good. — Where did he come from? From Germany. — From which part of Germany? From Coburg. — Who is now reigning in Coburg? His grandson. — Why was he called "the Good?" Because he has done much for his country. — What memorial have they made (put up) [vom Lehrer gegeben] in memory of Albert? The Albert memorial. — Where is the Albert memorial? In Hyde Park. — What did King Albert put up in Hyde Park? He got the Crystal Palace put up in Hyde Park. — Does the Queen always live in London? No, she has several large castles. — Where are those castles? One of them is in Osborne, another in Windsor, and another in Scotland. — Is Victoria only Queen of England? She is also Empress of India. — Has the Queen got children? Yes. — Whom did she entertain in Windsor Castle? Our Emperor in September 1892. — What German prince went last to see her in Osborne Castle? Prince Henry. — On what occasion? On his voyage to China. — For what purpose did he go to China? He went there in order to settle quarrels with the Chinese and to take possession of Kiautschou. — Where is Prince Henry now? At Peking. — To whom did he pay a visit there? To the Emperor of China. — What do the Chinese call their emperor? The son of the sun. — What is his name? I don't know. — What jubilee did the Queen celebrate in 1887? She celebrated the fiftieth anniversary of her reign. — Where did it take place? In Westminster Abbey. — What is Westminster Abbey? It is a big church in which famous men are buried. — Do you know a celebrated man, who died some days ago and who will probably be buried there? Gladstone, one of the greatest ministers of England. — When was the sixtieth anniversary of the Queen's reign? In 1897. — Do the English love their Queen? Yes, very much. — In which poem is the Queen celebrated? In the National Anthem. — How does it begin? "God save our gracious Queen!"

How the pupils learn to read and write, will be shown in the next essay.

O. THIERGEN

DRESDEN

PHYSICAL GEOGRAPHY IN THE HIGH SCHOOL

[*Continued from p. 404*]

Practical exercises.—The more progressive teachers of geography, general or physical, elementary or advanced, agree that a well-planned course should include practical exercises in the field and laboratory. Educational journals reflect this opinion in the space that they allow to outlines of practical exercises, concerning which a number of useful suggestions have been published in recent years. But there is not, as yet, any generally adopted plan for this phase of the subject, and its establishment is beset with many serious difficulties against which much effort must be persistently expended before they are overcome. It should be recognized at the outset that all practical exercises should be devised so as to contribute toward a better understanding of the subject, and not merely so as to pander to a fashion that leans toward other methods than those of the text-book. In the second place, the order of exercises should run as nearly parallel as possible to the presentation of the subject in the adopted text-book, so as to enforce and to extend the statements there presented. Some of the difficulties that stand in the way of carrying out these requirements inhere in the nature of the subject; for example, it is not possible to illustrate all the kinds of land forms met in the text-book by actual examples in the local field around the school. Other difficulties must today be laid at the teacher's door; for example, a want of preparation in field observation, so that the local opportunities for field study, often excellent, are almost neglected. Another difficulty concerns the outfit of the laboratory, for which there is no easily obtainable set of materials such as may now be bought for a physical or chemical laboratory. The first of these difficulties cannot be directly overcome, it must be avoided. The other two will be overcome in time; indeed, the rate of progress toward better conditions is today so rapid in the better schools, that one

may have great hopes for the future. Leaving the difficulties aside, let us turn attention to the possibilities and classify them under the four headings of the subject.

The earth as a globe offers a number of interesting exercises; such as determination of the attitude of the earth's axis, establishment of a true meridian and measurement of local variation, a schoolyard imitation of the method of measuring the size of the earth, an extension of the same by correspondence with another school a few hundred miles north or south, measurement of local latitude, determination of local solar time, and difference of longitude between two schools a few hundred miles apart, east and west. Simple and useful exercises for the laboratory may be devised in illustration of the dimensions of the earth as a whole, and of horizontal distances, mountain heights, and ocean depths on its surface. Interesting exercises in the projection and construction of maps may be presented very simply, even to scholars who have not studied formal geometry. The earth as a globe forms many more elementary exercises than most teachers imagine.[1]

Practical work on weather and climate is already well established in many schools. It often lacks the variety that might be given to it, yet it is certainly further advanced today than any other phase of the subject. In connection with the change of seasons, the revolution of the earth around the sun may be really taught observationally, if the teacher will but give a year to it, by leading the scholars to make record at intervals of a fortnight or a month, of star groups that rise in the east shortly after sunset. At the end of an annual circuit, the year as a time unit will be better understood than by memorizing a book definition; the latter method being one of the many cases in which teaching defeats one half of its object by going too fast. It is true that a verbal statement of the fact that the earth goes around the sun once a year can be easily learned and remembered; but there is little in this to cultivate the intelligence. On the other hand, the discovery that an extension of the line from the sun to the

[1] See "Practical Exercises in Geography," *Nat. Geogr. Mag.*, Vol. XI, 1900, pp. 62–78.

earth marks out a circuit through the stars in about 360 days is a lesson in intelligent observation and in the cultivation of one's own power of discovery that should not be neglected if intelligence along with knowledge, and not knowledge alone, is the object of education. It is evident that the method of learning that the earth revolves around the sun should be taught in an earlier year than the one which contains the course on physical geography here considered. The same is true of the annual change in the sun's noon altitude and the associated variation in the length of the day and in the strength of sunshine, and the resulting succession of the seasons. Local observations of weather, the relation of weather to season, and the correlation of local weather with the general phenomena of the weather maps[1] should also advance much more slowly than a class would pass over the corresponding pages in a text-book. All these topics require more time for their observational development than can be allowed in a high-school course; their proper place is in the grammar school. The high-school course following such preparation can advance rapidly to more advanced problems, such as are to be found in abundance, either in connection with local observations or with the comparison of local phenomena with their fellows in other parts of the world.

The ocean can be seen by very few of the scholars in our schools. Those who live near its shores may observe something of waves, shore currents, and tides; those who live on lakes or ponds may observe waves and wind drift, but not tides. Waves, currents, and tides may be imitated by experiments in a tank, but no one has yet undertaken to work out in detail just how such experiments can be best presented. They must always be difficult in schools where crowded class rooms offer the only contact of the teacher and pupil; they may be made relatively easy in schools where a good geographical laboratory is provided. Laboratory exercises on charts of ocean temperatures, depths, currents, and tides may be devised in great variety.

Observational work on the land.—The first chapter on the lands—that concerning the variety of their activities—offers

[1] See *Practical Exercises in Elementary Meteorology*, by R. DEC. WARD. Ginn & Co., Boston, 1899.

many opportunities for local observation, even by young scholars. The effects of rock weathering can be observed outdoors on buildings and rock ledges, and indoors on hand specimens. Transportation of weathered waste by running water is always open to observation and to illustration by experiment. Important principles can be deduced concerning the changes that must be effected on the earth's surface if plenty of time be allowed; and there are very few localities that do not offer sufficient examples of hill or valley forms by which the postulate of "plenty of time" can be established. The erosion of valleys by the action of rain and streams can be established as a highly characteristic feature of the lands by observation and experiment. The tank may be used again to exhibit the hypothetical consequences of elevating or depressing a land mass with respect to a sea level in altering its extent and shore configuration, and maps of actual regions may be at once shown in confirmation of the hypothesis thus illustrated. An intelligent view of the earth may be presented in this way, although care must be constantly taken not to allow the time element of the problem to be hurried. Some study of rocks and minerals may be made in connection with the activities of the lands, but the error of going too far into detail must be guarded against; a very little knowledge of minerals and rocks will suffice for the young geographer, and the small amount that is needed is best introduced directly in connection with the subject that calls for it (as lavas with volcanoes, limestone with caverns) rather than in an independent and preparatory course.

Models and maps.—Under the different kinds of land forms, each local field may be resorted to in connection with the topics for which it gives the best illustrations; but the practical difficulty here is to reach these topics in an out-door season. In any case, the local field should surely be studied in connection with some part of the text, so as to emphasize the reality of the subject that the books treat. Yet even the best fields are so limited in their variety of illustrations that constant resort must be had to models, maps, and pictures. These indoor materials have an advantage over the local field, in that they can be

introduced in connection with any part of the text, at any time and in any order desired. Models are very valuable if well made; they may be actual places or of ideal types. As an example of the first class, mention is made to Harden's model of Morrison's cove, Blair county, Pa., in which the zigzag habit of the Allegheny ridges is well shown: also of Topley's model of the Weald in southeastern England, where the chalk escarpment formed by the erosion of an anticline are well exhibited. For models of larger areas, the United States on a curved surface, like that of the earth, as made by Howell in Washington, are of too small a scale to illustrate local topographical form, but they are of great value in giving correct location to many examples in the text. The cost of a relief globe can be better expended on other things. As examples of the second class, I may be permitted to refer also to the three Harvard models, made under my direction by Mr. G. C. Curtis, and now published by Ginn & Co., Boston. The manifest difficulties in the way of the use of models are their comparative rarity, their expense, their size and their weight; but every school should have at least a few examples. Many exercises may be based upon them, graphic, oral and written. For example, in one of the Harvard models is a small or "young" volcano, whose lava streams have diverted streams and formed lakes in obstructed valleys. The preparation of a map and a written description of these effects of volcanic action would be profitable exercises for high-school or grammar-school pupils. The model of a young coastal plain affords good basis for simple inferences of a truly scientific kind. I have great hopes that a working tank model for the illustration of the development of land forms may be some day devised and reduced to practical form for school use. The ingenuity here needed is much less than that which has been expended in the construction of the apparatus often seen in physical and chemical laboratories, but it would be wasteful to demand the ingenuity of every teacher individually. Lacking the time to construct the model myself, I should be glad to place a workshop, material, and a quantity of advice at the disposition of a properly prepared co-worker — a teacher of experience, with

an inventive turn of mind and hands familiar with tools, preferred — with the confident expectation that results of great value could be obtained in a year's time.

Maps are of two kinds, according to their scales. Those of small scale showing a large area, as in wall maps, suffice to locate the places that are referred to in the text, but not to exhibit topographic form. Maps of large scale, including relatively small areas, would often afford no sufficient clue to their locality if none were named upon them, but they give very valuable illustration of form. The maps published by governmental bureaus in this country and in Europe are of great value here. An important result of placing these maps, now so easily obtained, before pupils in the public schools will be the wide distribution of the knowledge that such maps exist, as well as the formation of a habit of using them. Several lists of selected series of our own maps have been published.[1] These maps are at their best when they illustrate some specific form, as a water-gap cut through one of the Allegheny ridges in Pennsylvania, Maryland or Virginia; or Crater Lake, that remarkable water body occupying a superb volcanic caldera in Oregon; or the extraordinary cusps of Capes Hatteras, Lookout and Fear; or the meanders and the delta of the Mississippi as shown upon the invaluable map of the alluvial basin of the great river prepared by the Mississippi River commission. Definite exercises, partly graphic, partly verbal, can be assigned to pupils on such maps. Such exercises should stand in much the same indispensable relation to geography as that occupied by translation in language study.

Maps of intermediate scale, five or ten miles to an inch, are needed to include parts of a coastal plain large enough to illustrate their relations to one another, to the old land, and to the sea. Maps of this kind are difficult to obtain; the relief

[1] See Governmental maps for use of schools, by Davis, King & Collie, New York, Holt, 1894. Also, *Journal of School Geography*, September 1897, and October 1898. A list of U. S. maps selected for school use is given in Appendix M, to the author's Physical Geography, Ginn & Co., Boston, 1899. Foreign maps are treated in "Large scale maps as geographical illustrations," *Journal of Geology*, Chicago, IV, 1896, 484–513.

map of New Jersey shows part of a coastal plain of longitudinal relief; the geological map of Alabama presents the pattern of overlapping strata, but not the relief in a similar form, and hence is less serviceable for young scholars.

Pictures are very useful when in the form of lantern slides for projection, so that an entire class can see them at once, while the teacher presents appropriate explanations, but lantern slides should be supplemented if possible by pictures of large enough size and clear enough drawing to give good illustration of certain forms for description, when placed before the members of the class for individual study in the laboratory. A cañon, a mesa, an alluvial fan, or other small items of form can be thus portrayed. Specific exercises on such pictures are sometimes difficult to invent; but the translation of the picture into words and the explanation of its facts in accordance with the principles developed by previous study, afford useful preparation for observation during travel.

Place of physical geography in the school curriculum.—The place of physical geography in the school curriculum has been much discussed. The report of the Committee of Ten, adopting the recommendations of their subcommittee on geography, advised a general course of physical geography in the first year of the high-school course, and more special and advanced courses in "physiography," meteorology, astronomy or geology in the last year. The recent report of the National Educational Association on college admission requirements, following the advice of their subcommittee, makes a similar recommendation; the first cited report gives most detail to its outline of the higher courses, and the second report devotes most of its attention to the lower and more general course. My belief is that the latter will not remain very long in the better high schools, and that, as it descends into the grammar schools, its place will be taken by elective courses near the end of the high-school course. The reasons for this belief are as follows. First, a number of good grammar schools are already teaching, under "geography" or "physical geography" much material recommended in the National Educational Association report as

appropriate for the first year of the high school. Second, the rapid improvement of the grammar-school course in general geography, by omitting much old *memoriter* work and compressing the valuable remainder into shorter time, is actually providing a place for physical geography in the last year of the grades. Such a change must come to be generally approved, when it is seen how large a part of elementary physical geography is within reach of the grammar schools, and when it is remembered that every study thus added to the lower grades reaches a vastly greater number of school children than it would reach in the high school. Still more important is the third and final reason, namely, a growing belief that the existing methods of teaching geography in the grades is not rational enough to stimulate as fully as it should the mental activity of school children; the remnants of traditional methods in geography by which young intelligence is often hampered should therefore be replaced by an increasing attention to explanatory and practical methods, such as the subject of physical geography affords in an admirable way. For the present, the establishment of a good course in physical geography in the first high-school year is probably the best general plan; but it is not likely that the subject will hold a permanent place there. Ten years hence, elementary physical geography will have found its way into many grammar schools; twenty or thirty years hence, the high school that has physical geography in its first year and not in its third or fourth will be considered old fashioned.

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CAESAR'S ACCOUNT OF THE ANIMALS IN THE HERCYNIAN FOREST (*De Bello Gallico, VI, 25–28*).[1]

In his interesting comparison of the customs of the Gauls and the Germans, in Book VI of the Gallic War, Caesar has occasion to speak of the Hercynian Forest. The extent of this forest was so great, he tells us, that no one from the west part of Germany had ever gone to the eastern limit. It followed the line of the Danube, and seems to have corresponded, in general, with the mountains and forests of southern Germany, from the Schwarzwald to the Carpathian chain. From the forest itself Caesar passes, in chapter xxv, to the strange animals found in it, to which the three following chapters, xxvi–xxviii are devoted. The description is full of mistakes, and contains so much of the marvelous, that Henry Meusel, the latest critical editor of the Gallic War, rejects the three chapters from the text as an interpolation inserted by some credulous scribe.

Caesar as a rule is sober-minded, presenting only essential facts, in a style singularly free from embellishment or affectation. It is the purpose of this paper to inquire whether the three chapters contain anything that a man of the highest intelligence and sobriety of judgment, writing at the end of the Roman Republic, might not have included in such a description.

We must first observe that the three chapters professedly give information at second hand. This is clear from the introductory statement in chapter xxv: *multaque in ea (silva) genera ferarum nasci constat, quae reliquis in locis visa non sint.* It must further be noticed that zöology had not, in Caesar's time, become a science resting on exact observation. Aristotle had indeed recorded the habits of animals, and classified them in accordance with the laws of a rude physiology, but he had no followers; the sciences, of which he laid the basis, were checked by extravagant legends and fables. That Aesop's fox should talk with a crane,

[1] Paper read at the Classical Conference, Ann Arbor, Michigan, March 30, 1900, by Grace Griffith Begle.

or that a philosophic discussion should occupy the country rat when visited by an acquaintance from the town, is not to be wondered at when sober history abounds in similar examples. According to Livy, under the consulate of Gnaeus Domitius and Lucius Quintius an ox threw Rome into terror by the words: *Cave tibi, Roma!* When Lepidus and Catulus were consuls, we are told, a cock, in the farmyard of one Galerius, spoke like a human being, and Pliny[1] meditating on this fact gravely remarks that this was the only instance of the kind that he knew of.

The same Pliny[2] tells a marvelous story of a dolphin. A boy was accustomed every day on his way to school to cross the Lucrine lake; a dolphin observing this would approach the shore, take the child on its back and safely deposit the burden on the opposite side. This happened for several years, until the boy fell ill and died. The dolphin continued to come to the spot, and at last died of sorrow.

Woods, mountains, and seas were thought to abound in abnormal forms, such as dragons, winged horses and griffins. Even the Christian writers, Cyprian and Jerome, seem to have admitted the existence of centaurs, believing them to be fallen angels, condemned to stroll through dismal forests until the day of judgment. A phoenix is described by Tacitus[3] as revisiting Egypt in 34 A.D., after a disappearance for a series of ages. "The narrative has no doubt a mixture of fable," he says, "but that the phoenix, from time to time, appears in Egypt, seems to be a fact sufficiently ascertained."

Not to speak of the prevalence of absurd beliefs among the ignorant down to the present time, the early attempts made by our own writers to explain the presence of the huge bones found in various parts of the United States, when viewed by the light of present knowledge, are as amusing, and unscientific in spirit, as the theories of the ancients. Thomas Jefferson, in speaking of the mastodon, says much that borders on the marvelous; and most of the writers who followed Jefferson, in discussing the nature of the mammoth, regarded the creature as a gigantic

[1] *Natural History*, X, 21, 50. [2] *Natural History*, IX, 8. [3] *Ann.*, VI, 28.

flesh-eater, exhausting all the adjectives of the language to describe his fierceness. Some of them by putting together bones of many different animals concocted gruesome monsters. A certain Thomas Ashe in 1801 described one thus: "With the agility of the tiger, with a body of unequaled magnitude, the monster must have been the terror of the forest and man. In fine, huge as the frowning precipice, cruel as the bloody panther, swift as the descending eagle, must have been this tremendous animal, when clothed with flesh and animated with principles of life. From this review of these majestic remains, it must appear that the creature to whom they belonged was nearly sixty feet long and twenty-five feet high." Whittier's poem on the "Double-headed Snake of Newbury" was suggested by these lines of Rev. Christopher Toppan to Cotton Mather: "I made diligent inquiry at your command, and I am assured it had really two heads, one at each end, two mouths, two stings, or tongues."

These illustrations may serve to show how, in the centuries before the study of animals was put upon a scientific basis, all manner of beliefs regarding them were held by the most intelligent men. We may now pass to the detailed account of the animals mentioned in the chapters under discussion.

The first description, in chapter XXVI, is of a large animal somewhat like the deer in form; from its forehead midway between the ears a single horn rises, higher and straighter than the horns of any animal known to us. From the end of this horn, branches, which are like the palms of the hand when the fingers are extended, are spread out. According to the view of most naturalists, Caesar refers here to the reindeer, which once lived much farther south than now, and retreated north on the removal of the forests. Bones and antlers, which have been found in trees and lumber, prove that the animal was found in ancient times as far south as modern Switzerland. While it is open to question whether, on account of the mildness of the climate, the reindeer thrived in Germany at the time of Caesar, it is not improbable that a wandering reindeer might have been seen in the winter, at the eastern end of the forest. In regard

to the words *bos cervi figura* Buffon remarks that it ought not to surprise anyone that Caesar should give the name *bos* to an animal so different from the ox, since the Romans applied this term to any large unfamiliar animal which had cloven hoofs, horns, and lived on grass.

Several suggestions have been made to show how Caesar fell into the error of attributing but one horn to the reindeer. Perhaps the specimen described had lost a horn; as both horns run parallel to each other, if seen from the side, the two would appear as one; again, the expression may refer to the long projection from which both branches spring instead of growing independently like the horns of an ox.

Pliny[1] speaks of the *tarandrus*, meaning the reindeer, as an animal of the size of the ox. "Its head," he says, "is larger than that of the stag, and not very unlike it; its horns are branched, its hoof cloven, and its hair as long as that of the bear. Its hide is of such extreme hardness that it is used for making breast-plates. When it is frightened this animal reflects the color of all the trees, shrubs, and flowers in the spot where it is concealed, hence it is that it is so rarely captured." Cuvier remarks that this description was probably derived from the imperfect account which the ancients possessed of the reindeer; the hair of this animal becomes nearly white in winter, and in summer a brown or gray color.

The marvelous character of our narrative is further shown in the description of the elk. This animal, we are told, in form, and in the mottled appearance of its skin, resembled the goat, but it was much larger, with blunt antlers, and legs that had no joints. These elks never lay down to rest, and if thrown down by any accident, they could not raise themselves up. They leaned against trees while they slept, and the huntsmen, observing their habit, would make a trap for them by cutting into the tree; but only so far that it might still retain the appearance of standing firmly. Of course when the animal leaned against a tree thus weakened, it would fall with his weight, and he was left unable to rise. Such evidently was Shakespeare's idea when he wrote

[1] *Natural History*, VIII, 34.

("Julius Caesar," Act II, Scene I), "he loves to hear that unicorns may be betrayed with trees."

The belief was prevalent for many centuries that elephants were not able to bend their legs nor lie down, and as the joints of the elk's legs were quite firm and stiff, men very likely attributed to them that part of the fable about the elephant. Moreover, the inconveniences attributed to the elk by Caesar's narrative are said to be ascribed to it by some people in Germany today; and there is a current etymology which connects the word *Elen*, "elk," with *elend*, "wretched."

The delusion in regard to the elephant was supported by the fact that the elephant often sleeps standing, its huge body leaning against a tree or rock. Mr. William Brayley, a naturalist of the London Institution, writes: "Station to it is rest, except when greatly fatigued, or in great weakness from disease. From the construction of all the joints in its legs, and especially from that of the knee-joints, the elephant, when standing still, rests, as it were, upon four pillars, with scarcely any need of muscular exertion." He says that an elephant which died in the menagerie of the Jardin des Plantes at Paris was observed never to lie down, even in his last illness, until immediately before his death.

It is stated by Mr. Corse Scott,[1] under whose direction the elephant hunters in Bengal were placed, that "elephants, particularly goondahs, which are large male animals, that have strayed from the woods and the herd, have been known to stand twelve months at their pickets without lying down to sleep, though they sometimes take a short nap standing."

The popular belief concerning the elephant was, according to Professor Schlegel,[2] first delivered or first recorded from tradition by Ctesias, the Cnidian, in 380 B. C., so that it was already an old error at the time Caesar was writing of the elk. The absurdity respecting the elephant's posture in sleep, and the consequent mode of capturing him is also, Schlegel says, derived from Ctesias. Aristotle refutes the statements of Ctesias where

[1] "Manners, Habits, and Natural History of the Elephant," *Philosophical Transactions*, 1799, p. 44.

[2] "History of the Elephant and Sphinx," *Classical Journal*, XXXI.

he says[1] that "the elephant is not formed as some have said, but is able to sit down and bend his legs; from his great weight, however, he is unable to bend them on both sides at once; he leans either to the right side or to the left, and sleeps in this position, but his hind legs are bent like a man's."

Steevens, in his notes on Shakespeare, tells us that in a curious specimen of early natural history, "The Dialogues of Creatures Moralized," published early in the sixteenth century, mention is made of the "elefant that boweth not the knees." In the play of "All Fools" by George Chapman, published in 1605 (Act V, Scene I), is the passage: "I hope you are no elephant, you have joints." Shakespeare, in his Troilus and Cressida, makes Ulysses say (Act II, Scene III): "The elephant hath joints, but none for courtesy. His legs are legs for necessity, not for flexure." In "All's Lost by Lust," a play by William Rowley, written 1633, a woman is said to be "stubborn as an elephant's leg"—no bending in her.

"Bestiary," an English version, made in the thirteenth century, of a Latin physiologus, gives a description of the elephant which reminds us of Caesar's elk. It may be translated as follows:

There are elephants in the land of India,
In body like burly mountains.
They wade out into the water
In order that they may not fall down.
That is most in their thought,
For they have no joints
That they can rise with;
How this deer resteth him
When he walketh wide,
Harketh how it telleth here,
For he is all unwieldy.
A tree he seeketh certainly
That strong and steadfast is,
And leaneth himself
Confidently against it
When he is of walk, weary;
The hunter hath beheld this,
Who wishes to entrap him

[1] *History of Animals*, II, 1.

Where his best resort is,
To do his will.
He saweth the tree,
And propeth it beneath
In the wise that he can best,
Concealeth it well
That he is not aware of it,
When he maketh return thereto;
Sits alone himself
Beholds whether his contrivance
At all avail him.
Then cometh this elephant unwieldy
And leaneth him upon his side,
Sleepeth by the tree in the shadow,
And so both fall together.

In his conclusion the writer finds the analogue of the elephant in Adam, our first father, who fell by means of a tree.

Sir Thomas Browne, author of *Vulgar Errors*, takes up in chap. 1 of the third book, as the first common error, "That an elephant hath no joints." He wonders that men do strangely forget what is related by Suetonius in the lives of Nero and Galba, that elephants have been instructed to walk on ropes, in public shows, before the people: which is not easily performed by man, and requireth not only a broad foot, but a pliable flexure of joints; or that they call not to mind that memorable show of Germanicus, wherein twelve elephants danced unto the sound of music; lastly, he says, they consult not experience whereof not many years past we have had the advantage in England, by an elephant shown in many parts thereof, not only in the posture of standing, but kneeling, and lying down. The first edition of *Vulgar Errors* was published 1646, and, although Sir Thomas Browne writes that the opinion in regard to the elephant having no joints is at present well suppressed, he expresses a fear that it will revive again, citing a case in Italy, where, notwithstanding the opportunity of witnessing the habits of the animal afforded by an elephant, sent to Leo X by Emanuel, king of Portugal, "the error is still alive and epidemical, as with us."

Mr. Brayley, the naturalist whom I mentioned before, writing in 1836, says: "It remains a 'vulgar error' among the

uneducated classes even to the present day. It has long been the custom for the exhibitors of itinerant collections of wild animals, when showing the elephant, to mention the story of its having no joints, and its consequent inability to rise; they never fail to think it necessary to demonstrate its untruth by causing the animal to bend one of its forelegs, and kneel also, but I never saw this done without observing that it was witnessed with astonishment, and almost incredulity, by several persons present, whether the exhibition had been in London. or in a provincial town."

The last animal mentioned is the *urus*, the German aurochs, or wild ox. This was a little below the elephant in size, our description says, and like the bull in color and shape. As the urus is the largest of existing quadrupeds of the European continent, Caesar's comparison of it with the elephant is not incorrect. The strength and speed of these animals was very great, a fact which Pliny[1] also mentions, and they were so fierce that even when taken very young they could not be tamed. Young men hardened themselves in hunting them, and captured and killed them by means of pitfalls, for he who could produce the greatest number of their horns in public was considered a mighty hunter. The horns which were thus obtained they bound at the rim of the large end with silver, and used for cups at their most sumptuous banquets.

The aurochs still exists, although in small numbers, in the forest of Lithuania, where it is saved from immediate extinction by the protection of the emperor of Russia. Up to the time of Charles the Great it was hunted in the Hartz Mountains.

Notwithstanding the incredible details, the language of the three chapters is throughout Caesarian. There is nothing in any manuscript to suggest that they were a late addition. From a literary point of view, they fit in well with what precedes, and what follows. Thus, so far as concerns language and style, the presumption is in favor of their authenticity, unless it can be proved that the matter is inconsistent with Caesar's information

[1] *Natural History*, VIII, 15.

and belief. It seems to me that the evidence presented is sufficient to indicate that unless Caesar surpassed his contemporaries in zoölogical knowledge, he may well have believed what we find written in the chapters under discussion. Meusel's rejection of the chapters as spurious is without sufficient justification, and according to our present light we must consider them as the work of Caesar.

THE INFLUENCE OF THE STATE UNIVERSITY ON THE PUBLIC SCHOOLS[1]

BESIDES discharging all the other functions of a university, the State University must meet the responsibilities that come to it as the head of the public-school system of its commonwealth. These responsibilities are grave and numerous. That secondary education is dependent upon elementary — that higher education is dependent upon secondary and elementary, is apparent to all; but few grasp clearly the fact that elementary education is dependent upon secondary and higher, and that secondary education is not less dependent upon higher than it is upon elementary. The public school system cannot thrive if limitations of extension be imposed upon it. A paralytic stroke comes upon it at the point of limitation. Restrict it to elementary education, and apathy follows, at least in the seventh and eighth grades. Limit it to elementary and secondary education, and weakness appears in the upper years of the high schools. Let it end with the four years of the college courses, and ailing in the colleges appears. The higher the limitation is placed, the less deadly the result; but wherever it is placed, whether high or low, limitation brings some measure of disaster. Every student of educational history must have noted the wonderful revival of college education in the United States since the Johns Hopkins University introduced serious graduate work. This work has practically no limit.

This fundamental idea that the lower education is not less dependent upon the higher than the higher upon the lower has been clearly seen by some illustrious men. The modern educational movement in Germany, France, and the United States is due in no small measure to the influence of Prussia. Exhausted by disastrous wars with the first Napoleon, Prussia redeemed herself in half a century through the regeneration of her school

[1] An address given at the North Central Association of Colleges and Secondary Schools, St. Louis, Mo., March 1900.

system. The work of redemption was begun by Wilhelm von Humboldt. His plan embraced the reorganization of the public-school system from top to bottom; but the first step was to found the University of Berlin. He realized that the redemption of elementary and secondary education was impossible without a great university at the head of the public-school system.

In the opinion of the writer, one of the wisest educational thinkers that our country has produced is Thomas Jefferson. Through a magnificent public-school system he aimed to exalt Virginia and after her the other states of the Union. But his first step was to found the University of Virginia. His plan was in all essentials similar to that of Humboldt which it preceded in time. Prussia executed Humboldt's plan in its fullness; but Virginia mutilated the plan of Jefferson. No secondary or elementary public schools were established. Moreover the University of Virginia as founded was but a fragment of the institution of which Jefferson dreamed. Side by side with better education, he advocated the abolition of slavery.

But returning from examples to the doctrine that they exemplify, let me repeat with emphasis that the public-school system cannot be maintained in thorough efficiency in any part, unless it be maintained in thorough efficiency in every part, from the kindergarten through the graduate studies of the university.

The influence of a university is conscious and unconscious. The influence which it exerts unconsciously, it exerts also inevitably. Whether it concern itself with the schools below it or not, a great institution of learning must exeicise a powerful influence upon these schools. Until the administration of President Eliot it is doubtful if Harvard gave much attention to secondary and elementary education, as represented in the public-school system. Yet the unconscious and unintentional influence of Harvard was immense. The same may be said of the University of Virginia in the South. This unconscious influence is exercised by strong private institutions quite as effectually as by state institutions. It is the inevitable influence of a great establishment of higher learning. This unconscious influence a state university should unquestionably exercise. This it can

do only by becoming great. Therefore it is under obligation to the schools below to become morally and intellectually as great as possible. In increasing the depth and extent of its own instruction it is blessing unawares all the schools below.

But a state university, to fulfill its duty, must exert upon the schools below it a conscious influence also. While private institutions are not debarred from doing this, they are not nearly so well fitted for it. The fact that it is the head of the public-school system gives the state university opportunities that have to be acquired by private colleges. Moreover this fact justifies state institutions in expending money to widen the circle of their conscious influence, whereas private institutions would naturally hesitate to encounter the outlay. For a liberal outlay of money, be it understood, is indispensable. Perhaps this paper would be most useful if, without discussing further the general proposition, I point out some ways in which state universities may best exercise conscious influence upon the schools below them.

In the first place, in justice to secondary education, the university should not maintain a preparatory department. It is idle to quibble on this subject. A university that maintains a preparatory department does deep wrong to every secondary school in its commonwealth. The best thing it can do for itself and for the commonwealth is to strangle its preparatory department. Having had some experience in this matter, I am aware of the difficulties. The maintenance and improvement of state institutions is dependent in large measure upon the good will of the people. Nothing succeeds with the people like success.

In popular estimation the highest evidence of success is a large enrollment. It takes some courage therefore to abolish preparatory courses and to demand for admission to every department a high-school diploma. If this be done suddenly, the inevitable result will be a large reduction in enrollment. Numbers of students that apply for admission must be sent back home. These malcontents spread dissatisfaction in their respective neighborhoods, which brings great peril to the institution. No wise man would in a year abolish preparatory courses and require for admission to every department of the university a

high-school diploma. This would be courting disaster. But there is no reason why within a space of ten years any university may not abolish its preparatory courses and so raise the standards in every department, that at the end of the decade good high-school training shall be necessary for admission. If I may enforce the assertion out of our own experience, let me say that the Missouri University maintained a preparatory department for more than fifty years. In the fall of 1893, one year was dropped; the next fall another year; and the process of raising the requirements for admission to the various departments, including law and medicine, has been going on ever since. More than two thirds of the work has been completed. I hope to see it all completed by the fall of 1901. The longest period that it could reasonably require, would end in the fall of 1903.

The whole system of public instruction should be articulated. Naturally the university should approach first the high schools. These, when articulated with the University, become agents for the articulation with themselves of the elementary schools about them. Every high school should sustain to the elementary schools about it a relation similar to that which the university sustains to the high schools. This proposition will not be disputed. It may be profitable perhaps to examine the various ways of articulating the high schools with the state universities.

The first institution that attempted this was the University of Michigan. When a high school wanted to be articulated, a committee of the faculty was sent to examine it, the school paying the expense of the journey. So great is our debt to Michigan for discovering the idea, that we can readily forgive certain crudities in this method of articulation. To require a school to pay the traveling expenses may be equitable, but it is scarcely progressive. To send a committee of the faculty traveling over the country is scarcely commendable. If the committee examine schools often enough to become expert in the work, the professors might as well resign their chairs. If they take good care of their work on the campus, they will not examine schools often enough to make their judgment worth much. For many years I directed the work of articulation by

committees of the faculty, but paying traveling expenses out of our own treasury. I found it eminently unsatisfactory. A professor, profound in his specialty, knows too much and too little to be a good examiner. Sometimes he demands of the high schools what would do honor to the college. Sometimes he underrates them, believing that good work in his subject cannot be done except in a college. He may know his specialty, but the question arises whether he knows high schools. The University of California has pursued this method with more vigor than any other institution in America. Its committees, large in size, have traveled thousands upon thousands of miles. They are thoroughly attached to the method, but I venture to say that it is unfortunate. In the last six months Michigan has abandoned this method, and, following the example of Minnesota and Missouri, has appointed an Examiner of Schools. In Minnesota the examiner is paid by the state, but he travels under the direction of President Northrop. In Missouri an examiner has been maintained since the fall of 1894. He is appointed and paid by the university. He travels eleven months of the year visiting, during the regular session, high schools, and in the summer vacation, teachers institutes. All his expenses are paid by the university and he travels under the direction of the president. Many objections have been brought against examining schools through a single man. It has been declared that no one could be found sufficiently learned to measure a high school properly in all its branches. With us in Missouri the examiner must pass upon the instruction in Latin, Greek, French, German, English language and literature, history, mathematics, physics, chemistry, and biology. The high schools teach often other things, but these are the only subjects in which we examine. If it be asked where a man can be found capable of judging all these things, let me remark that the examiner does not have to teach all these subjects. It is by no means impossible to get a man of liberal college education and of wide experience in school work that is fully capable of measuring the instruction of a school in all these subjects; although it might be difficult to get a man thoroughly qualified

to teach them all. It goes without saying that when defects are found in a school they are reported to the local authorities. To do this effectually, without stirring up enmity, requires much tact. In Missouri the examiner always meets the school board. When the way is open he delivers a public lecture to the people of the town, sometimes illustrating it with the stereopticon. The burden of his lecture is, or ought to be, the present status of secondary education in the commonwealth. He tells of the admirable equipment that the neighboring town has for laboratories, of the fine library that he found in another town, of the new building in a third town, of how liberally a fourth town taxes itself, and so on. Thus, by praising this good feature in this school, and that in another he appeals to local pride in behalf of the local high school. He is called an examiner. It would be better to call him a high school builder. He sends to the university a carefully prepared report on every school visited. These reports are carefully bound in a volume each year.

What authority should the State University have over the high schools? In my opinion it should have none. In New York the Board of Regents exercises considerable control over all secondary education. In Minnesota the Board of Education, consisting of three persons, largely controls the public high schools. The chairman of this board is President Northrop. The high-school teachers are not allowed in New York to grade the papers of the students applying for graduation. This is done through the board. Now to my mind this necessarily implies distrust of the schools and exaltation of that very questionable thing known as examinations. The teachers of the high schools are trusted to instruct the pupils but not to examine them. If they are competent to do that which is greater, should they not be held competent to do that which is less? In Missouri the university has no control whatever over secondary schools, public or private. We should regard the acquisition of such power as a serious obstacle to our work. We have now the privilege of visiting these schools, of helping them, of advising them, of quarreling with them in gentlemanly manner,

and of loving them sincerely. We have the privilege of spending thousands of dollars per annum in promoting their interests, chiefly through the agency of the examiner and the summer school. This is sufficient for our purpose. More would be a hindrance.

Every state university should maintain an unquestionably good summer school for teachers. It is a blessing to the schools for their teachers to come, at least six weeks in the summer vacations, to a university to prosecute their studies. There is no reason why good work done in the summer school might not count toward a degree. In every subject there should be courses of two grades — the lower including those given in good high schools, and the upper courses of university grade. Teachers in the lower schools want to prepare themselves sometimes to teach in the high schools. Teachers in the high schools often want instruction in subjects which they do not teach, but in which they wish to become proficient. The courses of secondary grade should be perfect models of what such courses should be in the schools. The summer school should be practically free. A state university cannot afford to charge the teachers of its commonwealth for instruction. In Missouri the legislature makes an appropriation for the summer school. This sum we find sometimes insufficient. In that case we charge a fee of $5 to eke out the expense. Superintendent Maxwell, of greater New York has wisely laid down the principle that no teacher in that city can hope for advance in rank or salary who does not show advance in scholarship, as attested by work well done in approved summer schools. In Missouri, at least, the tide is setting strongly in favor of summer schools as a substitute for teachers institutes, in which some weeks are generally consumed in threshing old straw and in talking about pedagogy. I find by wide experience that while pedagogy is most valuable, what our teachers need most is profounder acquaintance with the subjects they teach.

A state university should maintain extension courses. Experience shows that where the population is sparse and the railroad facilities imperfect, the regular faculty cannot conduct

these courses advantageously. The loss to the students on the campus is greater than the gain by the general public. This is our experience in our own university. But we have begged the legislature — though hitherto in vain — to provide for a staff of extension lecturers who shall travel over Missouri arousing the intellectual activity of people that cannot possibly attend the university. Nine tenths of the people, old enough to receive instruction, are debarred from attending. Why should not the university send instruction to them? Some say the people would substitute this for attendance at the university. Such a result is not probable. The whole tendency of the thing would be to awaken people at their homes to the life intellectual, which would ultimately bring hundreds to the university that otherwise would not have come. I am not inclined to give much credit toward degrees for extension work. The idea should not be held out to people that they can stay at home, follow their ordinary pursuits, do a little extension study, and gain a university education. This would be ignoring the immense value of well-equipped laboratories, museums, and libraries, and the intellectual stimulus that comes from the association upon a campus of a large and learned faculty with hundreds of vigorous students. No extension work can rival residence in a strong university. Nevertheless it seems to me that the state universities owe to the people what instruction can be imparted through extension lectures and traveling libraries. The hope of the university is in the growing intelligence of the whole people. It should aim to spread and to deepen intelligence among all classes, from the cradle to the grave.

In conclusion, a number of smaller agencies might be mentioned for increasing the sympathy between the university and the schools of its state. One of these is an annual convocation of the teachers of the approved high schools on the campus of the university; another is circular letters to the teachers of the high schools on subjects of importance to them; another is strict attention to letters from teachers. Speaking from my own experience, I find that nearly a fourth of my time is occupied in one way or another in working for the schools of Missouri. The

only firm foundation for a state university is the respect and affection of an intelligent people. Salvation lies in lifting the people up to intelligence and in winning their respect and affection. To attain these ends the university should not begrudge time, thought, and money.

R. H. JESSE

THE UNIVERSITY OF MISSOURI.

RECENT EDUCATIONAL BIBLIOGRAPHY[1]

III

AMUSEMENT. *See* PLAY

BROWN UNIVERSITY

Bibliography of Brown University, 1756–1898. 20 pp., O. Providence, 1898.

Classed list, including publications of and about departments, officers, and students. Publications of alumni are not given.

CHAUTAUQUA

Chautauqua: a Bibliography. By F. W. FAXON (in *Bulletin of Bibliography*, July 1898, Vol. I, 86, 87).

Compiled *à propos* of the meeting of the American Library Association at Lake Chautauqua. Sixty-six titles are included, and the list was designed to be as complete as possible.

Fiction, in which the scene is laid at Chautauqua, and books and articles treating of the early or local history of the region are included.

There are no notes.

A Select Bibliography of Chautauqua. By. F. W. ASHLEY (in *Education in the United States*, 1900. Vol. II, 857–858).

This list includes nineteen well chosen titles, thirteen of which are in the preceding list. The point of view is educational, and the bibliography accompanies a monograph by Professor H. B. Adams on Summer Schools and University Extension.

CHILD-STUDY

Studies in Imagination. By LILLIAN H. CHALMERS (in *Pedagogical Seminary*, April 1900, Vol. VII, 123).

A bibliography of nine titles is added. All of them are articles in recent volumes of the standard American educational journals.

Die Entwickelung des sozialen Bewusstseins der Kinder. By W. S. MONROE, 88 pp., O. Berlin, 1899. (*Sammlung von Abhand. aus d. Gebiete d. pädagogische Psychologien u. Physiologie*, Vol. III, No. 2).

A brief bibliography follows each section.

[1] Nos. I and II are in the SCHOOL REVIEW for October 1898 and October 1899.

Rights of Children. By W. S. MONROE (in *Pedagogical Seminary*, April 1900, Vol. VII, 137.)

A bibliography of seven titles is appended.

Physical Nature of the Child and How to Study It. By S. H. ROWE. 207 pp. D. New York, 1899.

A classified list of one hundred titles of books and articles is printed on pp. 188–196. The subjects treated, with the number of references under each, are: Sight, 7; Hearing, 6; Other Senses, 5; Motor Ability, 10; Enunciation, 5; Nervousness, 6; Fatigue, 12; Habits of Posture and Movement, 8; Growth, 5; Adolescence, 15; School and Home Conditions, 21.

The selection and classification of titles is so satisfactory that regret is only sharpened at the lack of any descriptive or critical notes.

Why will not an author who has the books in his hand, and who is admittedly competent, venture upon evaluation for the guidance and information of other students?

Bibliography of Child-Study. By ARTHUR MCDONALD (in *United States Bureau of Education; Report of the Commissioner*, 1897–1898, Vol. II, 1350–1384.)

This author list of about seven hundred titles is the longest single list of titles on child-study which has yet been printed, but it cannot be compared for usefulness with the bibliographies by L. N. Wilson in the *Pedagogical Seminary*, or with the list in Miss Lawrence's *Classified Reading*.

Mr. McDonald's list is entirely without notes, has no subject index whatever, and is full of errors, due presumably to careless proofreading.

There are many titles (mainly foreign) included which are not found in Wilson's lists, and the converse is admitted by Mr. McDonald.

It would have been better to have included all or none of Mr. Wilson's lists.

Bibliography of Child-Study for 1898. By L. N. WILSON (in *Pedagogical Seminary*, September 1899, Vol. VI, 386–410.)

Supplements the list in the same journal for April 1898.

Contains 333 items, and like its predecessor is an alphabetical author list, with detailed subject index appended.

A few titles, not dated 1898, are included which were omitted in the earlier list.

Notes are fuller and more numerous than before.

The work is to be continued from year to year as a regular feature of the *Seminary*.

See also Defectives; Kindergarten; Play.

CITY SCHOOL SYSTEMS

Bibliographical References on City School Systems (in *Report of the Chicago Educational Commission*, 1899, Appendix J).

Thirty-six references to articles in periodicals, almost all of them to *Education*.

Mr. Philbrick's monograph and sets of reports are mentioned, where pertinent matter may be found; but the list seems to have been made up by going through a file of *Education* and selecting relevant material.

DEFECTIVES

The Education of Defectives. By E. E. ALLEN (in *Education in the United States*, 1900, Vol. II, 813–815).

A bibliography of ninety selected references is added.

The titles are about equally divided between education of the deaf, blind, and feeble-minded. There are no notes, and imprint data is often meager and vague.

Study of Defective Children. By W. S. MONROE. Boston, 1899. (*Child-Study Outlines*, Series 3.)

This series consists of eight (?) parts, and the greater portion of each one is devoted to the literature of the subject.

ECONOMICS

Economics as a School Study. By F. R. CLOW. 69 pp., D. New York, 1890 (*Economic Studies*, Vol. IV, No. 3).

Followed by a five-page bibliography.

EDUCATION

Common Sense in Education. By P. A. BARNETT. 321 pp. D. N. Y., 1899.

Bibliographical references at the end of each chapter. The titles given are not in any sense meant to be complete, neither are they, unfortunately, at all representative, being chiefly English books and articles. As the following list of chapter headings shows, the burden

of the book is the curriculum and methods in special studies: Instruction as Discipline; Discipline of Character; Physical Basis of Education; Genesis and Manipulation of Curricula; Audible Speech; Literature and Formal Linguistic Study; Latin and Greek; Mathematics and Physical Science; Geography and History.

Books for Teachers in Secondary Schools. By W. W. BISHOP (in *Educational Review*, February 1900, Vol. XIX, 175–186).

A list of 214 titles classified under the following captions: Biography of Educators; Philosophy of Education; Teaching; Psychology and Education; the Curriculum.

While such a selection is always invidious the choice in this list is likely to commend itself with little objection, as well for what is omitted as for what is included.

Again patience is tried by the entire absence of notes, which would increase the value of such a list many fold. Surely a man competent to compile such a list is also competent to add such criticisms and descriptions as would wonderfully help its use by those for whom it is meant.

Das gesamte Erziehungs- und Unterrichtswesen in den Ländern deutscher Zunge. 1242 + 113 p. O. Berlin, 1896.

A monumental work, carried on with government aid and by "Die Gesellschaft für deutsche Erziehungs- und Schulgeschichte."

It is a bibliography of the immense literature of education and pedagogy which is issued in the German language.

This first volume covers the year 1896, and is in ten parts with a full author and subject index to the carefully classified arrangement.

No periodical article nor school program is too small for inclusion, and the notes are characteristically German in their number and fulness.

With Volume II the work appears quarterly, and it is hoped that it is now on a sound footing and may be soon brought down to date.

Volume I, under the most capable staff of editors, took three years to compile, the great difficulty being the inauguration of an effective system for continuous and steady collection of material. Professor B. Schwalbe, of Berlin, is chairman of the society's publishing committee.

Bibliography of Education for 1899. By J. I. WYER and I. E. LORD (in *Educational Review*, April 1900, Vol. XIX, 334–393.)

This is the most important and extensive piece of educational bibliography which has appeared during the year.

It is planned to include a selection of the most important and notable books and periodical articles on educational subjects printed in English and bearing the imprint date 1899. It is meant to include every original contribution to the literature of education which is really worth while, and although, judged by this standard of inclusion, there are, of course, some omissions, yet the worker in educational fields will find this much the fullest list of current literature. It does not include purely local reports of separate institutions, provinces, colonies, states, or cities. For all this material the student is referred to the thousands of official reports issued in this country, Great Britain, and her colonies. All matter relating directly to child-study is omitted, as it is well indexed each year in the *Pedagogical Seminary*.

The distinctive features of the work are (*a*) careful analysis of all the important educational journals, and all articles of pedagogical interest in other journals. Each article in the National Educational Association proceedings and Report of the commissioner of education is entered separately under its subject; (*b*) liberal annotation: more than half of the titles being accompanied by critical or descriptive comment. This feature might, with profit, be much extended; (*c*) the classification by subject-matter, so that the worker in any line may find together the literature of interest to him. The decimal classification is followed, as being as satisfactory as any existing classification of educational literature, and because of its very wide use. Cross references are freely given to material on allied subjects.

An outline of the classification precedes the bibliography and makes use of it easy from the subject side, and an author index is appended; 618 titles are listed. The work is to be an annual feature of the *Review*.

GEOGRAPHY

Geographical Instruction: A Brief Bibliography of the Subject. By W. S. MONROE (in *Springfield, Mass., Library Assn.*, 1899. Special bulletin No. 12, pp. 49-56).

Twenty-six books, 10 articles, and reports and 3 journals are noted.

GERMANY. EDUCATION

The Secondary School System of Germany. By F. E. BOLTON. 398 pp., D. New York, 1900.

Pages 385–390 devoted to bibliography.

GREAT BRITAIN. EDUCATION

Farther Contributions Toward a History of Earlier Education in Great Britain. By W. C. HAZLITT (in *Antiquary*, 1899, Vol. XXXV, pp. 6–11; 43–49; 107–112; 204–210; 261–267; 371–376).

Continued in Vol. XXXVI, for 1900.

HERBART

Die Herbartische Pädagogik in der Litteratur. By ADOLF RUDE. 40 pp., O. Dresden, 1900.

Reprinted from *Pädagogische Studien.*

HISTORY

A Bibliography of the Study and Teaching of History. By J. I. WYER (in *American Historical Association; Annual Report for 1899*, Vol. I).

A list of about 600 titles classified by subject under the following heads: Philosophy of History; Educational Value; Place in Curriculum; Correlation with other Subjects; Primary Instruction; Historical Method; Use of the Sources; Methods of Study and Teaching, with four subheads: Methods in France, Germany, Great Britain, and the United States. In an appendix is given a list of collections of sources for American history and of the five most useful books to the teacher of history. The titles are arranged alphabetically by author under each section.

This bibliography was prepared to accompany the report of the Committee of Seven, but as both bibliography and report exceeded in size the original plan the former is now printed alone.

The point of view throughout, except in the section on Historical Method, is that of the teacher of history, not the historian.

The section Historical Method is for the historian and writer of history. It includes material on historical research, study of archives and documents, nature of history, etc. By far the largest section is

that on Methods of Study and Teaching which, with its geographical subheads, comprises more than one third of the titles.

The section Philosophy of History is, of course, only a selection of acknowledged standards from the vast literature of that subject.

Files of the leading English, French, and German educational journals have been examined for pertinent matter.

Descriptive notes are numerous.

It is believed that all important titles are included, and the list is by far the fullest bibliography of the subject in print.

HYGIENE. *See* SCHOOL HYGIENE

KINDERGARTEN

Reconstruction of the Kindergarten. By FREDERICK EBY (in *Pedagogical Seminary*, July 1900, Vol. VII, 284–286).

About fifty selected references accompanying a monograph with above title.

References are almost wholly to works in English or to English translations of German kindergarten literature.

Careless or incomplete titles; scanty imprint information and entire lack of any notes seem to indicate hasty or indifferent compilation.

LANGUAGE STUDY

Practical Study of Languages. By HENRY SWEET. 280 pp., O. London, 1899.

A two-page (pp. 279, 280) list of references by so high an authority is worth notice.

LIBRARIES. *See* SCHOOL LIBRARIES

NATURE STUDY

Course in Nature-Study. By ELIZABETH CARSS (in *Teachers' College Record*, March 1900).

A detailed syllabus followed by an excellent classified list of references for teachers. 165 titles.

PHYSICS

List of Books Recommended for a High-School Physical Laboratory (in *Proceedings of 32d Meeting Michigan Schoolmasters' Club.* 1899. Pp. 34–38).

Classified list of 215 titles, giving price and publisher. Important titles are starred. There are no notes.

PHYSICAL TRAINING

Teacher's Course in Physical Training. By W. P. BOWEN. 183 pp., D. Ann Arbor, 1899.

Includes a three-page bibliography.

PLAY

Amusements of Worcester School Children. By T. R. CROSWELL (in *Pedagogical Seminary*, September 1899, Vol. VII, 369–371).

Forty-five titles supplementary to Miss Sisson's list in *Barnes' Studies in Education* and *Wilson's Bibliography of Child-Study*.

There are no notes.

Bibliography of Play and Amusement. By AMY HEWES (in *Amer. Journal of Sociology*, July 1899, Vol. V, 134–144).

Covers American books 1876–1898; English books 1832–1898; French books 1840–1898, and German books 1890–1898, with a few earlier titles. A list of several hundred titles, classified under following heads: "Bibliographies, Dictionaries, and Encyclopedias," "Educational," "Ethical," "Historical," "Social," "Physiological," "Games (indoor)," "Sports (outdoor)." Only twelve of titles in preceding title are included. There are no notes, and all periodical literature is omitted. Full imprint information is given. There are few omissions of important titles, but there are many typographical errors. The point of view which guided selection of titles was the Psycho-Sociological one; the sociological significance of the development of play.

PSYCHOLOGICAL LABORATORIES

Literature of Psychological Laboratories (in U. S. Bureau of Education; Report of the Commissioner, 1897–8, Vol. I, 1195).

Fifteen titles, almost all of them references to periodical articles.

RHETORIC

References on the Teaching of Rhetoric and Composition (University of Michigan contributions to *Rhetorical Theory, No. 4*). By F. N. SCOTT. Ann Arbor, 1898.

An author list in two parts: (1) English Composition and Rhetoric; (2) German Composition and German in schools.

References are nearly all to periodical literature.

SCHOOL ARCHITECTURE

Bibliography of School Architecture and Sanitation (in *Education in the United States*, 1900, Vol. I, 461–464).

Forty-nine titles, chiefly books. Periodical articles should be more numerous. No notes.

Two thirds of references are too old to be of much present value.

SCHOOL HYGIENE

Health Inspection in the Schools. By W. H. BURNHAM (in *Pedagogical Seminary*, April 1900, Vol. VII, 93, 94).

List of twenty-four well-chosen papers follows a monograph with above title.

Chiefly periodical literature, and the medical point of view preponderates.

School Hygiene. By L. KOTELMANN. Translated by J. A. Bergström and E. Conradi. 391 pp., D. Syracuse, N. Y., 1899.

The author is probably the greatest living authority on the subject, and the 30-page bibliography of English and American works should be a useful and exhaustive list.

SCHOOL LIBRARIES

National Educational Association—Library Department. Report of the Committee on the Relations of Public Libraries to Public Schools (in N. E. A. proceedings, 1899, pp. 452–529).

On pages 460–466 is a graded list of books for reading in class and memorizing, and on pages 481–488 a list of reference books for schools, classic readings for first eight grades, and one hundred books of unqualified value for high school students to read. Name of publisher and price are given. Great care has been given to selection of titles and editions. The report may be had separate for 15 cents from the secretary of the N. E. A.

Select List of Papers Bearing on the Connection between the Public Library and the Public Elementary School. By J. J. OGLE (in Great Britain — Department of Education. Special reports on educational subjects, 1898, Vol. II, pp. 265–268).

An unannotated author list of eighty titles, almost all being articles in the *Library Journal.*

SUMMER SCHOOLS

A Selected Bibliography of Summer Schools. By F. W. ASHLEY (in *Education in the United States*, 1900, Vol. II, 859, 860).

Thirteen carefully chosen and judiciously annotated titles accompanying a monograph by H. B. Adams.

For further pertinent titles, see under head "Chautauqua" in this article.

TEACHERS AND TEACHING

Principles and Methods of Teaching. By C. C. BOYER. 393 pp., D. Philadelphia, 1899.

A four-page list of reference books is appended, including books on psychology, principles of teaching, and methods in special branches.

The list is classified by subject and contains 155 titles.

Publisher's name is given, but no notes.

Brief Bibliography of Books and Pamphlets Relating to the Training of Teachers. By J. J. FINDLAY (in *Great Britain*—Department of Education. Special Reports on Educational Subjects. 1898, Vol. II, pp. 373–376).

This is an appendix to a monograph by the same author on the study of education.

The bibliography is arranged by countries; includes thirty-eight titles, with a few helpful notes. Most of the references are to magazine articles and reports of British commissions. The selection of titles is not of the best.

UNIVERSITY EXTENSION

A Bibliography of University Extension. By F. W. ASHLEY (in *Education in the United States*, 1900, Vol. II, 860–863).

Forty-five titles carefully selected, intelligently annotated, and in arrangement and detail an excellent example of a well-done piece of bibliography.

References should be made to the leading titles at least of the many periodicals, present and past, devoted to university extension, and which in many respects are the best records of its growth and usefulness.

J. I. WYER

THE UNIVERSITY OF NEBRASKA

SECONDARY EDUCATION IN THE UNITED STATES[1]

AN HISTORICAL SKETCH

III. THE HIGH-SCHOOL PERIOD — *Continued*

We have seen the high-school movement in its beginnings. It is plain that this movement is different from any that had preceded it. The current of American practice in the matter of secondary education was turned into a new channel. So decisive a change calls for further consideration.

We shall find that this new development is not an isolated thing; but like other new educational institutions, the high school arose in response to new social conditions, which influenced our education profoundly, and were influenced by the schools in turn. The academies prepared the way for the high schools. What is more important, American society during the academy period was undergoing those changes which created the demand for high schools. Still further, it will appear that the same influences which produced the high schools brought about other and momentous changes in our systems of public instruction. Some of the most marked educational developments growing out of the new order of things, appeared in the domain of higher education. We shall better understand the change in secondary schools if we first take note of changes affecting the higher institutions; and particularly of the movement toward some sort of public control of those institutions.

From the earliest times, university organization has tended toward some form of administration which should secure freedom from interference in the discharge of educational functions. The prevalent form of organization which grew up with our early colleges was that which places the institution under the control of a self-perpetuating board of trustees, incorporated by

[1] Copyright, 1897, by ELMER E. BROWN.

the government.[1] This is the type of organization commonly found in the American academies. In the earlier times it was subject to many modifications. It was no uncommon thing for the colonies or the succeeding states to extend aid, either in money or in lands, to educational institutions managed by such close corporations. But within the first half century following the Revolutionary War there appeared a growing dissatisfaction with this system. The people sought to exercise some more direct control over institutions of learning, through the organs of government.

Even in colonial times this disposition may be seen; though in the most of the colonies ecclesiastical and governmental interests were so closely bound together that the direct exercise of governmental agency in educational affairs meant something very different from that state control which has grown up with the nineteenth century.

When Yale College, after long delay, was finally incorporated, in 1745, the corporation was made to consist of the president of the college and ten ministers, who should constitute a self-perpetuating body under the name of "The President and Fellows of Yale College in New Haven." Previous to this time and for nine or ten years thereafter the college received annual grants from the colonial legislature. Then various causes tended to produce alienation between the college and the government.

[1] "Visitable corporations in England are constituted in a very different manner. Trustees are not appointed who have no *beneficial* interest in the property, but the master and scholars are made a body politic; those who enjoy the benefit of the charity or donation are the corporation, and have in the first instance the management and government of it."—From the opinion of Chief Justice Smith (1807), cited in the brief for the Trustees of Phillips Academy. The Trustees of Phillips Academy *vs.* Andrew J. Waterman.

The claim of the resident fellows of Harvard College in 1722 and again in 1824 to a place on the corporation of that institution pointed in the direction of the English system. The title of the corporation, "President and Fellows of Harvard College," seems to follow the analogy of that system. The memorial of the corporation presented to the general court in 1722 declared, with reference to the constitution of their own body, "that *the resident tutors should never be able to make a major part*, because we think it contrary to the light of nature, that any should have an overruling voice in making those laws, by which themselves must be governed in their office-work, and for which they receive salaries."—PEIRCE. *A history of Harvard University*, p. 116.

Chief among these was the rigid ecclesiastical character and militant orthodoxy of the college. The conflict between the "New Lights" and the "Old Lights" in Connecticut drew upon the college increasingly hostile criticism. In 1763 a memorial was presented to the general assembly, praying that a committee of visitation be appointed "to inquire into and rectify the abuses in the college." This was the culmination of a hot discussion which had disturbed the colony for several years. It was held by leading lawyers that the general assembly was the founder of the college, and so had, according to English precedents, the right of visitation. President Clap prepared a counter-memorial for the college, maintaining that the first trustees and donors were the true founders, and that their right of visitation had passed under the charter to the president and fellows. This view of the case seems to have prevailed, for the legislature took no action in the matter.

During the Revolution and within a few years after its close, an effort was made to improve the relations of the college to the commonwealth. It was said of President Stiles that he "brought back the college to its historic place, in harmony with the legislature and all classes of people in the state." What was accomplished at this time, however, was not a return to the former relations, but a notable change in the constitution of the college. The change was only brought about after a long and bitter contest. The governor of the state proposed that a number of civilians be added to the managing board, as a condition to the renewal of public grants. To this the corporation refused to agree. In 1784 the opponents of the college proposed that the legislature either establish a rival college or proceed to alter the charter of Yale, but this proposal came to nothing. Finally, it was agreed, in 1792, that eight of the chief officers of state should be added, *ex officio*, to the college corporation; and the legislature granted to the college the arrearages of certain state taxes, which amounted to something more than forty thousand dollars. After this no important change was made in the constitution of the board until 1869, when the state relinquished six of the eight places occupied by its representatives in the

board. The six places have since been filled by representatives elected by the alumni of five years' standing; while the governor and the lieutenant governor of the state are still members *ex officio*.[1]

During the Revolutionary War the general assembly of Pennsylvania instituted an inquiry into the affairs of the College of Philadelphia. Doubtless many personal and local considerations lent animus to this movement: but the grounds of dissatisfaction alleged by the legislative committee of inquiry were the provision of the college charter requiring the trustees to take an oath of allegiance to the king of Great Britain; evidences of hostility to the government and constitution of the State of Pennsylvania on the part of "divers of the late trustees of the said college;" and "that your committee also have sufficient reason to believe that the fair and original plan of equal privileges to all denominations hath not been fully adhered to." The college charter was accordingly revoked by the legislature in 1779, and the "powers, authorities, and estates" of the institution were vested in a new corporation, the Trustees of the University of the State of Pennsylvania. This new body was composed of three classes of members: Six of the highest officials of the state government *ex officio;* the "senior minister in standing" in each of six religious denominations in the city of Philadelphia; and thirteen citizens individually named in the charter. Vacancies in the last named class were to be filled by vote of the remaining trustees, but their choice might be disallowed by the house of assembly within six months. The new university was thus placed under the virtual control of the people of Pennsylvania as exercised through the organs of the state government, and so much of ecclesiastical influence in the management as the new charter provided was distributed among the leading Christian denominations.[2]

[1] *Cf.* STEINER, *The history of education in Connecticut*, ch. v, secs. 1, 2, 3, 4, and 7.

[2] This bringing together of political and ecclesiastical members with others chosen by coöptation may very likely have been in imitation of the royal charter granted to King's College in 1754. See MOORE, *An historical sketch of Columbia College*, p. 22.

Ten years later the older corporation was revived, and for two years the college and the university existed, at least in name, side by side, as rival establishments. Then, in 1791, by agreement of the two boards of trustees, they were both merged into one institution, known to this day as the University of Pennsylvania. The board of trustees, twenty-five in number, is a self-perpetuating body, with the single exception that its president is the governor of Pennsylvania *ex officio*.[1]

When the effort was making in the middle of the eighteenth century to effect the establishment of King's (later Columbia) College, it met with determined opposition, led by Mr. William Livingston. It was Mr. Livingston's contention that the college should be established, not by charter, but by an act of the colonial legislature. He advocated "constituting a college on a basis the most catholic, generous, and free." "The opposition to the chartered college," says Mr. Moore, "claimed to stand upon the broad ground of resistance against the connection of a seminary of learning with any religious society whatever, but it was no doubt greatly animated, if not wholly occasioned, by a zealous dread of the Church of England in particular, and apprehensions of encroachment from that quarter on the religious freedom which the colonies enjoyed."[2] This opposition was, however, overcome, and a royal charter was secured in 1754. This charter named as governors of the college, the Archbishop of Canterbury and the first Lord Commissioner for trade and plantations, several of the highest civil officials of the colony, the mayor of the city of New York, the rector of Trinity Church, ministers representing four other Protestant denominations, and the president of the college, all *ex officio;* and twenty-four citizens of New York, named in the instrument, this number presumably to be kept up by a process of coöptation.[3] During the Revolution the college was greatly in disfavor, and its Tory president, Dr. Cooper, was obliged to flee for his life. For a time instruction

[1] The text of several important documents relating to the history of the University of Pennsylvania may be found in THORPE, *Benjamin Franklin and the University of Pennsylvania*, chap. I. Extended quotations from the documents appear in the *Catalogue* of the University for 1899–1900, pp. 11–17.

[2] *Op. cit.*, p. 15. [3] *Idem*, p. 22.

was wholly discontinued. In 1784 a movement began in the state legislature "for the establishment of seminaries of learning and schools for the education of youth." The friends of the college took this occasion to present to the legislature a petition for the rehabilitation of that institution, with such revision of its charter as would fit it to be the head of the proposed state system of education. This petition represented that parts of the college charter were "inconsistent with that liberality and that civil and religious freedom which our present happy constitution points out." The combined outcome of this legislative movement and this petition from the college was the University of the State of New York. In the form given to that institution by the legislation of 1784, the board of regents was a most unwieldy body, consisting of six leading state officials and the mayors of New York and Albany, *ex officio;* representatives of the several counties of the state, appointed by the governor with the approval of the council of appointment; representatives of the several religious denominations of the state, chosen by the clergy of the respective denominations; and representatives of the founders of any colleges or schools admitted to the university. Moreover, the fellows, professors, and tutors of the several colleges were made "regents of the said university, *ex officio*, and capable of voting in every case relative only to the respective college to which they shall belong, excepting in such cases wherein they shall respectively be personally concerned or interested." Nine members were to constitute a quorum of this composite body—a provision which made it easy for Columbia College to control the board, since its large representation in the New York City contingent could be easily assembled at the place of meeting, while the country members could be got together only with extreme difficulty. This board was virtually a board of trustees of Columbia College, but it was also "empowered to found schools and colleges in any part of this state, ... every such school or college being at all times to be deemed a part of the university."

The fear of undue ecclesiastical influence was apparently set at rest by the provision that professors should not be subjected to any religious test; but the country members of the

board and of the legislature distrusted the college and desired to further the interests of the academies. Nor was the new arrangement satisfactory to the friends of the college, who could not be sure that the interests of that institution would be steadily and intelligently provided for by a board so constituted. Different schemes of reform were proposed, and the legislation of 1787 was adopted as a compromise measure. This provided that no "trustee, president, principal, tutor, fellow, or other officer of any college or academy, [shall] be a regent of the university." The board of regents was to be composed of twenty-one members, two of whom, the governor and lieutenant governor, should be regents *ex officio*, the remaining members being elected by the legislature. Columbia College was given a self-perpetuating board of trustees, of twenty-nine — later twenty-four — members.[1]

Harvard college seems to have been at the outset subject to the direct control of the general court of Massachusetts Bay colony. In 1642 this control was delegated to a board of overseers consisting of the president of the college together with certain civil and ecclesiastical dignitaries, all holding their membership in the board *ex officio*. This board was "accountable" to the general court. In 1650 the general court granted a college charter, which erected a corporation, consisting of the president and the treasurer of the college and five "fellows," who were to constitute a self-perpetuating body, the acts of which should be subject to the approval of the overseers. This general form of organization has continued to the present day; but it has passed through many conflicts and vicissitudes, which have resulted in important changes in the constitution of the board of overseers and in the relations of the several parts of the system one to another. Passing over the checkered colonial history of the institution, we may note that the state constitution adopted in 1780 provided for the continuance of the college under this form of government, with only such interpretation of the earlier acts as was necessary to adjust them to the new political order. It was expressly provided in this instrument, "that

[1] *Cf.* SHERWOOD, *University of the State of New York*, chapter II. MOORE, *Op. cit.*

nothing herein shall be construed to prevent the legislature of this commonwealth from making such alterations in the government of the said University, as shall be conducive to its advantage and the interest of the republic of letters, in as full a manner, as might have been done by the legislature of the late province of Massachusetts Bay."

In 1810 the legislature passed an act making a great change in the board of overseers. The board as now constituted was to consist, in addition to the president of the college and certain state officials, *ex officio*, of fifteen ministers chosen from the Congregational churches and fifteen laymen. This act was not to go into effect until it had been approved by both of the college boards. It was so approved, however, and a new board of overseers was constituted accordingly. In 1812 the legislature repealed this act, without reference to the approval of the college boards. The boards held that their approval was necessary to the validity of the act. In 1814 the act of 1812 was in its turn set aside by the legislature, and the act of 1810 confirmed with some modification. This act of 1814 distinctly provided that the approval of the college boards should be necessary to its validity; and such approval was in fact promptly secured. The Massachusetts constitutional convention of 1820–1 proposed to declare the board of overseers free to elect to membership in their body "ministers of churches of any particular denomination of Christians;" but the proposal was rejected by the people. In 1843, however, this change was brought about. Finally, in 1865, the right of the state government to representation in the board of overseers was given up entirely, and that board, with the exception of the president and treasurer of the college, who are members *ex officio*, became representative of the college alumni of five years' standing.[1]

These occurrences in several of our chief institutions of learning may be variously interpreted. They seem to represent a slow and painful readjustment of those institutions to the great changes in political and social conditions which appeared

[1] *Cf.* BUSH, *History of higher education in Massachusetts*, chapters II–IV. Some of the more important documents referred to are presented in the appendices to PEIRCE, *A history of Harvard University*.

in the latter half of the eighteenth and earlier part of the nineteenth century. The dominant influences of the earlier colonial times were ecclesiastical, and the colleges of that time were largely, though not exclusively, seminaries for the training of ministers. In the most of the colonies there was more or less of direct connection between governmental and ecclesiastical affairs. Perhaps it would be fair to say that this was not so much in the nature of an alliance between two sharply distinguished institutions as it was a blending of these two great human interests, between which very few as yet drew any clear line of demarcation. In education as in other affairs the two agencies, civil and ecclesiastical, were intimately bound together. To increase the confusion which meets the student of these times, private initiative in a variety of forms is found entering freely into combination with the agency of the church and of the state.

A notable paper was published some years ago by President Magoun, of Iowa College, in which the attempt was made to unravel these different agencies in the beginnings of American education.[1] The discussion is marred by a kind of special pleading, but it constitutes nevertheless an important contribution to our understanding of the subject, and presents a great collection of pertinent facts. Yet it may be questioned whether such an attempt can ever be altogether successful. The several agencies in question were, in fact, far less completely differentiated than they are now. We are not so much called on to trace the strands of the present back into the past, as to trace from the past down into the present the slow process by which the things which we now distinguish come to be distinct from one another.

As the Revolution drew on, great changes became manifest in colonial society. Even the more homogeneous of the colonies became widely diversified in the religious character of their population. Politics became a more absorbing concern. The spirit and ideas of democracy steadily advanced. With the success of the Revolution, there came a great wave of national spirit.

[1] *The source of American education—popular and religious.* The *New Englander*, Vol. XXXVI, pp. 445–486.

Men began planning a greater future for the United States than many had dreamed of before, and these plans, of necessity, took large account of the problem of public education. French influence was in the ascendancy. The doctrines of individualism and secularism were gaining ground. As the tide of emigration to the West set in, men began to plan commonwealths new from the ground up, and great schemes of public education entered into their plans, as a matter of course.

Under such conditions, men became more and more opposed to state establishments of religion. The ecclesiastical character of the colleges then in existence aroused deep-seated antagonism. The colleges were looked upon as representing the interests of a class or section of society and not of the whole people. But the love of learning was gaining ground, together with an appreciation of the value of learning to others than those of the professional class. In casting about for a way to secure a better system of higher schools, two courses seemed open — either to impose some sort of public control on the institutions then existing or to establish alongside of the older colleges new institutions controlled by the organs of the state. It is not to be supposed that definite purposes gave direction to the new movement or that it followed any sort of scheme definitely marked out from the start. But, half-blindly, men remote from one another were groping their way to the same goal, and through many devious ways were pursuing one of the two main courses pointed out above. The idea of public control pure and simple did not commend itself at once to men who had been brought up under a system of private or ecclesiastical management of schools. For a generation or more the striving after public control took for the most part the form of an effort to improve, through legislative agency, the institutions then existing. The exact relation of the state legislature to chartered institutions within the state had not yet been settled. The period was one in which this relation was slowly coming to a clear determination — in which accordingly public and private institutions were becoming fully differentiated; and the culmination of this process was reached, so far as a purely legal question was involved, in the famous Dartmouth College case.

Dartmouth College was founded through the devoted efforts of the Rev. Eleazar Wheelock, who became its first president. In 1769 it received a charter from George III. This instrument erected a close corporation to act as trustees for the college; and it conferred on President Wheelock the privilege of nominating his successor, who should remain in office until the appointment should be disapproved by the board of trustees. President Wheelock in his will named his son John as his successor. John Wheelock served the college with marked efficiency for many years. After a time serious differences arose between him and certain members of the board of trustees. These differences seem to have been at the outset theological in their character. They soon involved a large circle of those interested in the college in New Hampshire and neighboring states, many leading citizens being enlisted as partisans of either the one side or the other. President Wheelock finally appealed to the legislature for a committee of investigation, charging the trustees with religious intolerance, with violation of the charter in attacks upon the presidential office, and with other breaches of trust. The legislature voted by a large majority to appoint such a committee. The trustees then removed the president and appointed his successor. The governor of the state in a message to the legislature took grounds against the trustees; and the legislature passed an act, June 27, 1816, declaring that "the college of the state may, in the opinion of the legislature, be rendered more extensively useful," and enacting accordingly "that the corporation, heretofore called and known by the name of the Trustees of Dartmouth College, shall ever hereafter be called and known by the name of the Trustees of Dartmouth University."[1] The membership of the board of trustees was increased from twelve to twenty-one, the president being made a member of the board *ex officio*, and the governor and counsel being authorized to appoint in the first instance the number of

[1] The resemblance between some steps in this controversy and certain passages in the history of Yale College and of the University of Pennsylvania is perhaps too obvious to call for special note. The plan of organization adopted for Dartmouth University suggests at once the governing boards of Harvard College as then constituted.

trustees necessary to complete the board to the number of twenty-one. A board of overseers was also constituted, of twenty-five members, having power to inspect and confirm, or disapprove and negative, such votes and proceedings of the board of trustees as shall relate to the appointment and removal of president, professors, and other permanent officers of the university, and determine their salaries; to the establishment of colleges and professorships, and the erection of new college buildings," etc. Of this board, the president of the senate and the speaker of the house of representatives of New Hampshire, and the governor and lieutenant governor of Vermont were to be members *ex officio*. The governor and counsel of New Hampshire were authorized to appoint the remaining members of this board and to fill vacancies in the same as they should occur. It was further enacted that "perfect freedom of religious opinion shall be enjoyed by all the officers and students of the University."[1] The board of trustees of the college maintained that the legislature had no power of interference in their affairs, and carried the matter into the courts. The supreme court of the State of New Hampshire decided against the college. The case was then carried into the supreme court of the United States. Daniel Webster was of the counsel for the college, and his argument in this case added greatly to his fame as a constitutional lawyer. The opinion of the court was pronounced in February, 1819, by Chief Justice Marshall. The finding of the New Hampshire court was reversed. The decision was summarized in the following terms:

> The charter granted by the British crown to the trustees of Dartmouth College, in New Hampshire, in the year 1769, is a contract within the meaning of that clause of the constitution of the United States (Art. 1, s. 10) which declares that no state shall make any law impairing the obligation of contracts. The charter was not dissolved by the Revolution.
>
> An act of the State of New Hampshire altering the charter without the consent of the corporation in a material respect is an act impairing the obligation of the charter, and is unconstitutional and void.
>
> Under its charter Dartmouth College was a private and not a public corporation. That a corporation is established for purposes of general charity,

[1] The original charter contained an equally liberal provision as regards students, but this provision does not seem to have included the officers of the college.

or for education generally, does not, *per se*, make it a public corporation, liable to the control of the legislature.[1]

This decision marks an epoch not only in American jurisprudence, but also in American education. Chancellor Kent said of it that it "did more than other single act proceeding from the authority of the United States to throw an impregnable barrier around all rights and franchises derived from the grant of government, and to give solidity and inviolability to the literary, charitable, religious, and commercial institutions of our country."[2] On the educational side it completed the differentiation between public and private corporations, and assigned the most of the higher schools and colleges then in existence to the latter class. It effectually checked the movement toward legislative interference with educational close corporations, and in so doing it turned the efforts looking toward public control of education into the other channel, *i. e.*, into the establishment of institutions of learning under the immediate direction of public corporations. The same number of the *North American Review* which reported the finding of the Supreme Court in the Dartmouth College case contained an article in which the newly established University of Virginia was made the text for an urgent appeal for state appropriations for higher education.

We have seen that as early as 1779 Jefferson's plan for an educational system for the State of Virginia contemplated making William and Mary College the head of that system. But this purpose was finally dropped on account of the rigidly ecclesiastical character of the college. There seems to have been at a later time a serious project to secure the greater part of the property of the college and divert it to the uses of a university. But this scheme also failed, and the outcome of more than forty years of effort looking to a worthy educational establishment for the whole state, was that the college was left stranded and decadent while the University of Virginia rose to eminence, encouraged by state support and under public control.

[1] 4 WHEATON 517.

[2] *Commentaries on American Law*, thirteenth edition, Vol. I, p. 419.

A long line of state universities followed. The clear field opened to the commonwealths of the West was especially favorable to their establishment, and the gift of public lands to each new state in turn for the establishment of seminaries of learning encouraged the builders of those states to plan large and liberal things.

ELMER ELLSWORTH BROWN

UNIVERSITY OF CALIFORNIA

(*To be continued.*)

EDITORIAL NOTES

GEORGE HERBERT LOCKE

MR. WILLIAM K. HILL, editor of the *Educational Review*, of London, England, will write for the November number of this journal on "Recent Educational Movements in England;" Professor H. W. Crew, of Northwestern University, Evanston, will have an article on "How to make the Teaching of Physics a Training for Power;" Professor Elmer E. Brown, of the University of California, will continue his interesting series of articles on the "History of Secondary Schools in the United States."

PRESIDENT HADLEY in the August *Atlantic* says: "A man might possess a vast knowledge of our social and political machinery and yet be absolutely untrained in those things which make a good citizen;" and so he agrees that it is character and an enlightened public opinion which make good government possible, and not a special knowledge of the science of civics.

THE principal of a high school writes us that he has been experiencing great difficulty with the subject "rhetoricals" in his school. He wishes that some one would discuss it in this journal. We think that he is not the only one in trouble over this subject, and we shall be glad to hear from others upon this important part of secondary school work. Tell us of your experience.

THE American Institute of Instruction celebrated the anniversary that made it three score and ten years old by meeting in Halifax, Nova Scotia. The meetings were held in the morning and the afternoons were given up to social enjoyments. By this arrangement the gathering was a great success intellectually and socially. The international feature was added to by the presence of a representative from Jamaica. There were above 600 persons enrolled of whom about one half were from the New England states.

TO THOSE who are interested in Plato's theories of education, and to whom the profusely annotated edition of the *Republic*, by Jowett, is too expensive, the publication of *The Education of the Young in the Republic of Plato*, translated, with notes and introduction, by Dr. Bernard Bosanquet, will be greeted with pleasure. An introduction of some twenty-five pages outlines very well the general education of the time and prepares the reader for the specific treatment in the *Republic*. It is a work of about two hundred pages and is published by the Macmillan Company.

WILLIAMS COLLEGE, like her big neighbor, Harvard, will hereafter not require Greek as an "indispensable prerequisite" to admission. Those who

wish the A.B. degree must present satisfactory qualifications in one of five groups of subjects. Greek is included in one of these groups, Latin in all five, German in two, and French in two. All the studies of the Freshman year are prescribed; in the Sophomore year only six out of ten hour's work a week are elective; in the Junior year six hours out of fifteen are prescribed. All the students must attend at least nine tenths of all college exercises.

WE sometimes hear the change called a decided promotion when a man leaves a responsible position as principal of a high school to accept a position on the faculty of a college. That is not always a correct estimate, and the proof is seen in the increasing tendency of college professors to accept responsible positions in school work, especially as principals of high schools. Dr. John P. Cushing, professor of history and political economy in Knox College, Galesburg, Ill., has accepted the position of principal of the Hillhouse High School, New Haven, Conn., from which Mr. Beede resigned to accept the position of superintendent of the schools of that city.

WHEN starting on one of his lecturing tours Mr. Elbert Hubbard, of the *Philistine*, was told that if his itinerary was through Denver "you must see Van Sickle's school. Why, there they carry out your gospel and yet probably never heard of you — reduce discipline to the minimum; keep everybody sweet; do things with their hands, and grow strong through expression." In the August number of his journal, Mr. Hubbard tells his readers that all this was true, and says of Mr. Van Sickle: "When you test Van Sickle use Troy weight. In soul-gravity he is great. He is so big that I doubt whether Denver can keep him much longer." Mr. Hubbard's doubts had some foundation, for Baltimore has claimed Mr. Van Sickle as superintendent of schools. We hope that the *Philistine* will keep up its interest in education.

OUR text-books on astronomy are too often so technical that it is difficult for a mature person to understand them, and certainly it is absurd to expect children to be interested enough to pursue a subject to which there is such a disheartening introduction. Astronomy ought to be intensely interesting to children, and in a recent volume of *Home Reading Books*, Appleton & Co. have supplied the very thing necessary in *Stories of the Great Astronomers*, by Edward S. Holden, Sc.D., LL.D. Not only are necessary facts given, but they are associated with the lives of those who gave them to us, and the blending of the human with the material makes a very attractive and interesting book with a decided educational value. The book is profusely illustrated, and its appearance and general make-up could not be improved. It is published at 75 cents.

HISTORICAL novels dealing with life in early Rome are always fascinating to the boy in secondary schools, and he is agreeably surprised to find that the Romans, with whose language he is now beginning to struggle, were men like as we are. When neither humanity nor classical archeology is

sacrificed in the tale, teachers find it a valuable adjunct to their efforts. Such a book is *A Friend of Caesar*, written by William Stearns Davis. This is a tale of the fall of the Roman Republic, 50–47 B. C., and throws an interesting light upon the domestic, social, and political life of the times, and this in the guise of an intensely interesting story in which there is no overshadowing of characters, but each one has a place and a part in the drama. Though there are many characters there are no lay figures. Teachers of Latin and of history will find the book a decided help. Children who are reading Caesar's *Gallic War* will be interested in the delineation of his character in this book. The Macmillan Company publishes it at $1.50.

THE following figures indicate the number of students who graduated this year from these high schools of Michigan. If we had the population and the total school enrollment there would be additional interest. As it is Albion makes an excellent showing:

	Boys	Girls	Total	High school enrollment
Detroit	61	98	159	2478
Grand Rapids	62	60	122	1127
Ann Arbor	35	35	70	613
Saginaw, E. S.	22	36	58	572
Lansing	18	35	53	452
Albion	19	31	50	225
Ypsilanti	21	23	44	254
Battle Creek	10	33	43	412
Hillsdale	15	28	43	210
Bay City	12	30	42	428
Muskegon	13	22	35	396
Owosso	10	24	35	266
Jackson	11	21	32	378
Port Huron	5	23	28	264
Saginaw, W. S.	7	21	28	298
Grand Haven	8	19	27	168
Kalamazoo	10	15	25	417
Hastings	12	10	22	153
Marshall	6	9	15	182
Pontiac	9	4	13	226

DR. TIMOTHY DWIGHT, ex-president of Yale University, contributed an exceedingly thoughtful article to the *Saturday Evening Post*, of Philadelphia, in its issue of August 25, under the title "Some Suggestions for College Men." Rarely have we read a more timely and practical treatment of the great question of education, and we can perhaps best indicate its tenor by reproducing the last paragraph, which treated of the responsibilities attendant upon opportunity:

> The college man of today, by reason of the advance of learning, the improved methods of instruction, and the better education opened in the preparatory years, has far wider opportunities and far greater possibilities than his predecessor of the earlier period. If all the advantages which the new age offers and all the good which

pertains to it can be secured it may not be doubted that the manly development in the intellectual sphere, as related to the life of the individual as well as to that of the world, will be nearer to the ideal than ever before. But in the moving on of the years, and attendant upon the changes which have taken place, influences have become manifest in consequence of which a greater personal responsibility for his education is laid upon each individual man. In view of these influences the writer presents the suggestions of this brief article to college men to the end that, if it may be so, the responsibility may be more fully appreciated and the hindrances which stand in the way of the best results may be overcome or removed by each one upon whom the responsibility falls. Let us who are educated men, whether older or younger, ever bear in mind the thought that education, like religion, belongs primarily to the inward life, and that the secret of its usefulness and its highest value for the man, and for all men, is to be found there. Let us also remember that the best education is that which gives growth and energy to all the powers of the inward life, and enriches that life, in its every part, by an ever fresh and vitalizing force.

THERE are but few of the various university commencement addresses which are read, and perhaps it is well so, but occasionally there is one to which public attention ought to be drawn on account, not only of the scholarship which it displays, but also of the suggestiveness of its treatment of the subject and the inspiration that comes from a sympathetic reading. Such an address was that delivered by Professor John M. Coulter, of this University, at the University of Michigan on the "Mission of Science in Education." It is a clear statement of the educational value of science, its right to a place in the curriculum, and what may be expected of it in the way of making life more significant. We quote from the closing paragraphs so that our readers may get a glimpse of Mr. Coulter's point of view:

In conclusion, may I be permitted to say that the full significance of scientific training will appear only when it begins in some form in the primary schools and touches the student at every stage of progress. Appealing as it does to the most natural tendencies of childhood, its greeting at the threshold of school experience is that of the one familiar friend, whose presence relates the young to things which they can see and handle, and saves them from that desolation of spirit and mental warping which comes from exclusive contact with the conventional and the intangible. The university owes a great service to the schools in this particular, and the tentacles of its influence must constantly be reaching delicately and inquiringly into school instruction. What the schools can do or cannot do, what they should do or should not do, are questions which cannot be answered in *ex cathedra* fashion. The wilful ignorance of many university instructors in reference to the work of schools upon which they depend is amazing. The university as a whole recognizes and encourages the intimate relationship, but only an instructor here and there interests himself in discovering the real situation. The result of this appears usually in requirements for admission, which are often adapted to some theoretical university position rather than to the possibilities of the modern American high school. In the debates upon these admission requirements a large faculty is apt to be divided, and the line of division usually separates those who know the schools from those who do not. If the latter be in the majority, the university is at once effectively handicapped. There is much talk

of forcing schools to university standards, but this forcing is necessarily artificial and temporary if it runs counter to the inevitable tendencies which one who knows recognizes in the American school system. This system is more impregnable than the universities, for it is more extensive and better adapted to the peculiar conditions of American civilization. It is only a question of time when every university will recognize the fact that it must adapt itself to the possibilities of the schools, and that ancient or artificial standards can be maintained only so long as they approve themselves to the experience of the schoolmaster. The mountain will never come to Mahomet. To compel schools to differentiate early a small and select and expensive class for entrance to the universities is unfair both to school and to the university, and seriously checks the diffusion of higher education. To deny the privilege of breathing the university atmosphere to any product of a good secondary school involves such a narrow conception of education that one dislikes to associate it with the university. It has always seemed an anomaly that universities are inclined to rate themselves more upon the basis of their raw material than their finished product. A fine-meshed screen is set up at the beginning of the university career, when it would seem far more logical to set it up at the other end. This matter of entrance has much to do with the opportunity given to science to express itself in education. If its most promising and best trained material is turned back or handicapped when attempting to enter the university, a certain kind of educational theory may command the result, but it is a blockade against the general progress of education, in so far as it cuts off a great agency from operating upon the legitimate material.

NEW PUBLICATIONS

Quaint Nuggets: Selections from Fuller, Hall, Selden, Herbert, and Walton. Compiled by Eveline Warner Brainerd. Cloth, 136 pages. Price 45 cents. New York: Fords, Howard & Hulbert.

Temprano y con sol y tres otros cuentos. Por R. Diez de la Cortina, B.A., of the University of Madrid. Paper cover, 75 pages. Price 35 cents. New York: William R. Jenkins.

A History of England. By J. N. Larned; with Tropical Analyses, Notes, etc., by Homer P. Lewis, Principal English High School, Worcester, Mass. Size 7¾×5½ in.; pp. xxiii+672. Houghton, Mifflin & Co.

Historical Jurisprudence. By Guy Carleton Lee, Ph.D., Johns Hopkins University. Size 9×6 in.; pp. xv+517. Price $3. New York: The Macmillan Company.

Sesame and Lilies. By John Ruskin. With an Introduction and Notes. Riverside Literature Series. Paper cover, pp. xii+97. Price 15 cents. Houghton, Mifflin & Co.

Plutarch's Alexander the Great. Done into English by Sir Thomas North. With an Introduction and Notes. Riverside Literature Series. Paper cover, pp. ix+114. Price 15 cents. Houghton, Mifflin & Co.

Cornelius Nepos — Twenty Lives. Edited by John Edmund Barss, Latin Master in the Hotchkiss School. Size 7½×5 in.; pp. xiv+316. New York: The Macmillan Company.

Dix Contes Moderne. Des meilleurs auteurs du jour. Edited by H. A. Potter, A.B., Commercial High School, Brooklyn. Size 7½×4¾ in.; 95 pages. Boston: Ginn & Co.

The First Book of Birds. By Olive Thorne Miller. Size 7¾×5¾ in.; pp. viii+144. Houghton, Mifflin & Co.

Stories of the Badger State. By Reuben Cold Thwaites. Cloth, 12mo, 255 pages. Illustrated. Price 60 cents. American Book Company.

Exercises in Mind Training. By Catharine Aiken. Cloth, 12mo, 122 pages. Price $1. American Book Company.

Shakspere's Julius Cæsar. Edited with Notes and an Introduction. By George C. D. Odell, Ph.D., Columbia University. Size 7½×5 in.; pp. lvi+161. New York: Longmans, Green & Co.

Elements of English Grammar. By George P. Brown, Indianapolis, Ind., assisted by Charles De Garmo, Cornell University. Size 7½×5 in.; pp. 252. Price 60 cents. Chicago: Werner School Book Company.

The Story of Ulysses. By M. Clarke, author of the Story of Troy, etc. Cloth, 12mo, 283 pages. Illustrated. Price 60 cents. American Book Company.

English: Composition and Literature. By W. F. Webster, Principal East High School, Minneapolis, Minn. Size 8×5 in.; pp. xxvi+274. Houghton, Mifflin & Co.

Harvey's Elementary Lessons in Language and Grammar. By Thomas W. Harvey, A.M. Cloth, 12mo; 168 pages. Illustrated. Price 35 cents. American Book Company.

The Art of Study. A Manual for Teachers. By B. A. Hinsdale, Ph.D., University of Michigan. Size 7½×5 in.; Cloth, 266 pages. Price $1. American Book Company.

Imitation in Education. By Jasper Newton Deahl, A.M. Columbia University Contributions. Magazine form; 103 pages. Price 60 cents. New York: The Macmillan Company.

The Historical Development of School Readers and of Method in Teaching Reading. By Rudolph R. Reeder, Ph.D., Columbia University. Columbia University Contributions. Magazine form; 92 pages. Price 60 cents. New York: The Macmillan Company.

Child Life in Many Lands. A Third Reader. By Etta Austin Blaisdell and Mary Frances Blaisdell. Size 7¾×6¼ in.; 192 pages. Price 30 cents. New York: The Macmillan Company.

Domestic Science in Grammar Grades. A Reader. By L. L. W. Wilson, Ph.D., Philadelphia Normal School. Size 7½×5¼ in.; pp. ix+193. Price 60 cents. New York: The Macmillan Company.

Logical Chart for Teaching and Learning the French Conjugation. By Stanislas Le Roy. New York: William R. Jenkins.

Diary of a Western Schoolmaster. By J. K. Stableton, Superintendent of Schools, Charleston, Ill. Size 7½×5¼ in.; 140 pages. Chicago: Ainsworth & Co.

Fortuna Y Otros Cuentos. Por R. Diez De La Cortina, B.A., University of Madrid. Paper cover, 135 pages. Price 35 cents. New York: William R. Jenkins.

A German Reader for Beginners. By H. C. O. Huss, Princeton University. Size 7¼×5 in.; pp. viii+208. Boston: D. C. Heath & Co.

Studies and Notes in Philology and Literature. Vols. VI and VII. The Origin and Sources of the Court of Love. By William Allan Neilson. Published under direction of the Modern Language Departments of Harvard University. Boston: Ginn & Co.

Der Prozess. Von Roderich Benedix. Edited by Benjamin W. Wells, Ph.D. (Modern Language Series.) Pp. 135. Boston: D. C. Heath & Co.

Outline Studies in History of Education. By Arvin S. Olin, A.M. Size 8×5¾ in.; 120 pages. Published by the author, Lawrence, Kans.

A Modern English Grammar. By Huber Gray Buehler, Hotchkiss School. Cloth, 16mo, 308 pages. Price 60 cents. New York: Newson & Co.